

I-405, Tukwila to Renton Improvement Project (I-5 to SR 169 – Phase 2)



Corridor Program
Congestion Relief & Bus Rapid Transit Projects

DRAFT SECTION 4(f) EVALUATION

March 2008





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SUMMARY

Project Purpose and Need

The I-405 Corridor Program Final Environmental Impact Statement and Final Preliminary Section 4(f) Evaluation (August 2002) analyzed four build alternatives and the No Build Alternative. The alternatives analysis found that no other feasible and prudent alternative is more effective than the Preferred Alternative in minimizing potential harm to Section 4(f) resources.

This Draft Section 4(f) Evaluation is a follow on document to the I-405 Corridor Program and analyzes effects to Section 4(f) resources at the project level for the Tukwila to Renton project, which is a phase of the I-405 Corridor Program.

The I-405, Tukwila to Renton Improvement Project (I-5 to SR 169 – Phase 2), referred to as the Tukwila to Renton Project, is part of the overall I-405 Corridor Program designed to improve safety, reduce congestion, and add travel capacity.

Project Alternatives

Build Alternative

The Tukwila to Renton Project would extend approximately four and one half miles along I-405, from I-5 to SR 169, and approximately two miles along SR 167, from I-405 to SW 43rd Street. The project would:

- Add capacity to both I-405 and SR 167.
- Replace bridges over the Green River and Cedar River and add one new bridge over the Green River.
- Improve the SR 181 and SR 169 interchanges.
- Reconstruct the SR 167 interchange.
- Replace the two local street accesses to Renton Hill.

No Build Alternative

The No Build Alternative assumes that the improvements associated with the Renton Nickel Improvement project are constructed and serve as the baseline condition. Only routine activities such as road maintenance, repair, and safety improvements would be expected to take place between 2014 and 2030. This alternative does not include improvements

that would increase roadway capacity or reduce congestion beyond baseline conditions. For these reasons, it does not satisfy the project's purpose to reduce congestion on I-405 between I-5 in Tukwila and SR 169 in Renton. The No Build Alternative has been analyzed in this evaluation as a comparison for the effects associated with the Build Alternative.

Section 4(f) Resources

Section 4(f) of the Department of Transportation Act of 1966 (49 USC 303) prohibits the Federal Highway Administration (FHWA) from approving a transportation project that uses land from a significant public park; recreation area; wildlife or waterfowl refuge; or land of an historic site of nation, state, or local significance unless (1) there is no feasible and prudent alternative and (2) the project includes all possible planning to minimize harm to the property. For the Tukwila to Renton Project, this Section 4(f) Evaluation assessed Section 4(f) lands located within a quarter-mile of the proposed I-405 improvements between I-5 in Tukwila and SR 169 in Renton. The precedent for examining out 0.25 mile from the proposed improvements permits the identification of potential adverse effects resulting from the proposed project and was generally agreed upon in the *I-405 Corridor Program Final Preliminary Section 4(f) Evaluation*.

We evaluated effects on Section 4(f) resources based on guidance contained within the FHWA Section 4(f) Policy Paper issued March 1, 2005; Title 23 of the Code of Federal Regulations, Section 771.135 (Section 4(f)); and the WSDOT Environmental Procedures Manual published in March 2006. The baseline conditions for this evaluation assume completion of the improvements that have already been environmentally cleared and permitted as part of the Renton Nickel Improvement Project.

There are 23 publicly-owned parks, two historic resources, and no waterfowl or wildlife refuges near the proposed Tukwila to Renton Project right-of-way. Of these, 19 parks and the two historic properties are protected Section 4(f) resources.

The Section 4(f) parks:

- Are publicly owned;
- Open and available for use by the public;

- Are used for public recreation activities as the major purpose; and
- Are considered to be of local or regionally significant.

The Section 4(f) historic sites are identified as properties of local, state, or national significance and are included on or are eligible for the National Register of Historic Places.

Section 6(f) Resources

Section 6(f) resources are defined as public outdoor recreational lands purchased or developed with financial assistance from the Land and Water Conservation Fund (LWCF). Passed by Congress in 1965, the Land and Water Conservation Fund Act (LWCFA) provides grants that pay up to half the acquisition and development cost of outdoor recreation sites and facilities. Section 6(f) of the LWCFA addresses transportation projects and prohibits the conversion of property acquired or developed with these grants to a non-recreational purpose without approval of the Department of the Interior's National Park Service (NPS). There are two Section 6(f) resources near the proposed Tukwila to Renton Project: the Duwamish-Green River Trail/Christensen Greenbelt and the Cedar River Trail – South Loop. These resources are also Section 4(f) resources.

Recreation and Conservation Funding Board (RCFB) Investment Properties

RCFB investment properties are defined as public outdoor recreational lands purchased or developed with financial assistance from the State. The Recreation and Conservation Office (RCO) is a Washington state agency charged with implementing policies and programs and administering state and federal grant programs for recreation and habitat conservation. Within the study area, three RCFB investment properties were identified: the Duwamish-Green River Trail, the Cedar River Trail – South Loop, and the Cedar River Trail. The RCO must approve uses of RCFB properties protected under Section 4(f) if these properties benefitted from state and federal grant programs.

Project Effects

During development of the project, WSDOT strove to find reasonable options that avoid effects to the community and

the environment while improving driving conditions for motorists on I-405. As part of this process, WSDOT identified opportunities to avoid and minimize adverse effects to Section 4(f) resources. As a result of these efforts, Section 4(f) uses would occur at only five resources. These five resources include:

- Duwamish-Green River Trail Trailhead
- Cedar River Park
- Liberty Park
- Cedar River Trail
- Narco Property

Exhibits 4-3 and 4-4 illustrate the locations of these resources.

FHWA and WSDOT determined that there would be no constructive uses at any of the Section 4(f) resources.

Direct, temporary, and constructive uses as defined by Section 4(f) are discussed in the Introduction.

Measures to Avoid or Minimize Effects

To meet project objectives for improved operations on I-405, WSDOT studied numerous design alternatives wherever there would be a potential effect on a Section 4(f) resource.

Duwamish-Green River Trail/Christensen Greenbelt

WSDOT studied eleven avoidance and minimization alternatives for improving the SR 181 interchange, which included improving access from Tukwila Parkway to northbound I-405. No feasible and prudent alternatives exist to construct this connection without extending Tukwila Parkway east across the Green River. Because the Duwamish-Green River Trail/Christensen Greenbelt parallels the Green River, none of the alternatives studied are able to avoid this resource. Based on coordination with the RCO and the NPS, the protected Section 4(f) trail comprises a width of 14 feet. While no land would be permanently incorporated into the transportation facility, the trail's slope would be revised to ensure adequate clearance for the trail and continue to pass beneath the bridges as it does today. The trail and disturbed trail edges would be restored following construction pursuant to the *I-405 Context-Sensitive Solutions Master Plan*. FHWA and WSDOT determined this construction activity would result in

a temporary occupancy of the protected Section 4(f) resource. Constructive uses would not occur as a result of the proposed modifications to the trail. Currently five existing bridges cross over the trail within the study area. The proposed new bridge would be constructed adjacent to the existing bridges. Conditions experienced by the trail user would remain relatively unchanged with respect to noise, air quality, and visual quality.

Duwamish-Green River Trail Trailhead

Land from the trailhead would be permanently incorporated into the proposed transportation facilities as a result of the construction of the Tukwila Parkway extension. The remaining portion of the site would be restored by replacing existing picnic tables, signs, trash receptacles, and landscaping. WSDOT also proposes to replace the displaced parking adjacent to the proposed stormwater detention site immediately west of the existing parking.

Interurban Trail

WSDOT studied eleven avoidance and minimization alternatives for improving the SR 181 interchange, which included improving access from Tukwila Parkway to northbound I-405. No feasible and prudent alternatives exist to avoid the trail, because the trail currently runs under I-405 adjacent to support piers and next to SR 181. There is no additional right of way available to adjust the project alignment.

WSDOT coordinated with the City of Tukwila Parks Department during development of the Build Alternative. This coordination resulted in a design that proposes to realign the trail, creating a smoother-flowing route that would cross under I-405 parallel to the Union Pacific railroad. The realignment to replace the current indirect route would be done in conjunction with reconstruction of the I-405 bridges over the railroads. FHWA and WSDOT determined this construction activity would result in a temporary occupancy of the protected Section 4(f) resource. The Interurban Trail has always existed in the shadows of I-405. The proposed trail realignment would not alter its proximity to I-405.

Constructive uses would not be triggered by the proposed construction. Conditions experienced by the trail user would remain relatively unchanged or slightly improved with respect

to noise, air quality, and visual quality. Currently, the trail crossing beneath I-405 is adjacent to SR 181. When it is realigned, the trail would be further from SR 181 and thus further from noise generated along SR 181.

James Nelsen House

There would be no direct, temporary, or constructive uses of the James Nelsen House. Modeling demonstrated that noise levels would increase and begin to approach the NAC for residences, but would not reach a dBA level that would constitute a use. Air quality is expected to improve slightly as traffic from the adjacent freeway would operate more efficiently. Views from the James Nelsen House would be altered by the construction of the Tukwila Parkway Bridge. However, the current setting of the James Nelsen House is adjacent to the I-405/SR 181 interchange and within a commercially zoned area. The addition of the Tukwila Parkway extension and the acquisition of property would not substantially change the current views from the house.

During construction, fencing would be placed to establish the limits of construction and ensure there would be no encroachment near the historic structure. Retaining walls to minimize the footprint and avoid the historic structure are an integral component in the Tukwila Parkway design. Areas that would be disturbed by construction, including landscaping, would be restored in kind.

Veterans Memorial Park

Two design options—Mill Avenue and Main Avenue—are proposed in the vicinity immediately adjacent to Veterans Memorial Park. Both options would involve changing traffic flow patterns on Main Avenue S and Mill Avenue S due to the proposed closure of Houser Way N east of Mill Avenue S. All parkland effects would be avoided with the construction of the Mill Avenue design option.

The Main Avenue design option would result in permanent acquisition of a portion of the Section 4(f) resource. The acquisition at Veterans Memorial Park would affect existing landscaping, but it would not affect the primary purpose of the park: the Memorial. Landscaping temporarily disturbed by the construction would be restored to recreate the character and design intent at the Memorial.

The results of the alternatives analysis demonstrate that the Mill Avenue design option would be both feasible and prudent and would avoid permanent direct use of Veterans Memorial Park. In recent discussions with the City of Renton, WSDOT has learned that the City plans to potentially develop a civic center campus in the vicinity of Mill and Main Avenues and may possibly relocate Veterans Memorial Park. These plans are currently conceptual and lack funding. However, when funding is secured for this portion of the I-405 Tukwila to Renton Project, WSDOT may update its Section 4(f) analysis to include the most current baseline condition. If at that point Veterans Memorial Park is relocated by the City from its current location, the Main Avenue design option may be reconsidered.

Cedar River Park, Liberty Park, Cedar River Trail, and the Narco Property

WSDOT and the City of Renton worked together extensively over the period of several months to identify opportunities for avoidance and minimization of impacts to existing major recreational facilities at Liberty Park, Cedar River Park, Cedar River Trail, and the Narco property, while accommodating an improved (widened) I-405. The concept to integrate Liberty Park, Cedar River Park, and the Narco property into one large complex emerged from the collaborative process with full support from the City and WSDOT. This design scheme would redevelop both existing parks, realign the trail, develop the Narco site with sports fields, and acquire an additional property to develop baseball fields. Throughout the development of this design scheme, the City and WSDOT explored opportunities to avoid or minimize effects to the resources and arrived at a consensus on necessary and desirable park improvements, and which of these improvements would be considered mitigation for unavoidable effects as a result of the I-405 project, and which would be city-desired recreation improvements.

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ACRONYMS AND ABBREVIATIONS

Term	Meaning
CFR	Code of Federal Regulations
dBA	decibels in the A-weighted scale
DOT	U.S. Department of Transportation
EA	environmental assessment
FHWA	Federal Highway Administration
HOT	high-occupancy toll
HOV	high-occupancy vehicle
HUD	Department of Housing and Urban Development
IAC	Interagency Committee for Outdoor Recreation
LWCF	Land and Water Conservation Fund
LWCFA	Land and Water Conservation Fund Act
NAC	Noise Abatement Criteria
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NPS	National Park Service
NRHP	National Register of Historic Places
RCFB	Recreation and Conservation Funding Board
RCO	Recreation and Conservation Office
SR	state route
USC	U.S. Code
USDA	U.S. Department of Agriculture
USDOT	U.S. Department of Transportation
WHR	Washington Heritage Register
WSDOT	Washington State Department of Transportation
WWRP	Washington Wildlife Recreation Program

GLOSSARY

Term	Meaning
acquisition	The purchasing of property, residences, or businesses for right-of-way necessary to construct or support a project.
adverse effect (historic and cultural resources)	Within the context of an historic and cultural resources analysis, an effect to an historic property that alters the characteristics which qualify it for the National Register of Historic Places in such a way that the property's eligibility for the National Register would be diminished.
arterial	A major street that primarily serves through-traffic, but also provides access to abutting properties. Arterials are often divided into principal and minor classifications depending on the number of lanes, connections made, volume of traffic, nature of traffic, speeds, interruptions (access functions), and length.
A-weight	A standard frequency weighting that simulates how humans perceive sound (dBA).
bicycle lane	A portion of a roadway reserved for preferential or exclusive use by bicycles. These lanes are identified using striping, signs, and/or pavement markings.
buffer (land use)	A transitional area that separates land uses that are not naturally compatible. Often the buffer is green space, and is termed a landscape buffer. Other times, a buffer can be a structure or a type of development.
capacity	The maximum sustained traffic flow of a transportation facility under prevailing traffic and roadway conditions in a specified direction.
Code of Federal Regulations (CFR)	The arrangement of the general and permanent rules published by the executive departments and agencies of the Federal government. It is divided into 50 titles that represent broad areas subject to federal regulation. Each volume of the CFR is updated once each calendar year.
congestion	The condition when unstable traffic flows constrain travel speeds to less than the posted limit. Recurring congestion is caused by constant excess traffic volume compared with the highway's capacity. Nonrecurring congestion is caused by unusual or unpredictable events such as traffic accidents.
construction footprint	The physical area affected by project construction activities.

Term	Meaning
constructive use	A type of indirect use in which a transportation project's proximity effects (as opposed to direct effects) are so severe that the activities, features, or attributes that qualify a resource for protection under Section 4(f) are substantially impaired. Examples include excessive noise levels, diminished aesthetic features, or other indirect intrusions on the resource's environment or utility.
context-sensitive solutions	A collaborative, interdisciplinary approach to develop a transportation facility that fits its physical surroundings and is responsive to the community's scenic, aesthetic, social, economic, historic, and environmental values and resources, while maintaining safety and mobility.
corridor	Within the context of a visual analysis, the road or highway and the adjacent area that is visible from and extending along the highway. The distance the corridor extends out from the highway may vary depending on different factors, such as land use and topography, or the corridor may be defined as a set width, such as one-quarter or one-half mile.
cultural resource	Any district, site, building, structure, object, person or people, document, or traditional place that may be important in American history or prehistory.
decibel (dB)	A logarithmic based unit of measure of sound pressure.
Department of the Interior (DOI)	The nation's principal conservation agency, the DOI plays an important role in conserving the nation's natural and cultural heritage. It comprises many agencies, including the Bureau of Indian Affairs, Bureau of Land Management, the Fish and Wildlife Service, and the National Park Service.
Department of Transportation (DOT)	As the federal steward of the nation's transportation system, the DOT comprises agencies that provide transportation services to the American public, including the Federal Highway Administration; the Federal Transit Administration; the Federal Aviation Administration; and the U.S. Coast Guard.
direct effect	An effect caused by an action or alternative and occurring at the same time and location. Effects may be ecological, aesthetic, historic, cultural, economic, social, or health-related.
direct use	The physical and permanent procurement of a protected resource for use by a transportation project.
duration	The length of time of an event.

Term	Meaning
easement	An agreement with a property owner that provides a limited right to make use of a property.
effect	Something brought about by a cause or agent; a result. This may include ecological, aesthetic, historic, cultural, economic, social, health, or other effects, whether direct, indirect, or cumulative. Effects may include those resulting from actions that may have both beneficial and detrimental effects.
eligible	Refers to cultural resources that meet the National Park Service criteria for listing on the National Register of Historic Places.
environmental impact statement (EIS)	A document prepared under the National Environmental Policy Act and/or the State Environmental Policy Act that identifies and analyzes, in detail, environmental effects of a proposed action. As a tool for decision-making, the EIS describes positive and negative effects and examines reasonable alternatives for an undertaking.
extraordinary magnitude	Within the context of a Section 4(f) analysis, a reference to exceedingly high costs or other substantial objectionable factors associated with a project alternative that characterizes the effects as beyond consideration as feasible and prudent.
feasible and prudent	Within the context of a Section 4(f) analysis, this phrase refers to the viability of an alternative that avoids the use of a Section 4(f) resource. The term "feasible" refers to the constructability of a project -whether or not it can be built using current construction methods, technologies, and practices. The term "prudent" refers to how reasonable the alternative is—in essence, whether or not it makes sense.
Federal Highway Administration (FHWA)	One of several agencies in the U.S. Department of Transportation, the FHWA provides federal financial assistance to the states through the Federal Aid Highway Program, the purpose of which is to construct and improve the National Highway System, urban and rural roads, and bridges.
general-purpose lane	A freeway or arterial lane available for use by all traffic.
high-capacity transit (HCT)	A system of public transportation services and facilities that provides a substantially higher level of passenger capacity, speed, and service frequency than traditional public transportation systems operating principally on general-purpose roadways. Examples include express buses on HOV lanes, passenger ferry service, light and heavy rail systems, and bus rapid transit.

Term	Meaning
high-occupancy vehicle (HOV)	High-occupancy vehicle is a special designation for a bus, carpool, or vanpool provided as an encouragement to increase ride-sharing. Specially designated HOV lanes and parking are among the incentives for persons to pool trips, use fewer vehicles, and make the transportation system more efficient. HOV lanes are generally inside (left-side) lanes, and are identified by signs and a diamond on the pavement. Currently, two or more (2+) occupants are required to use the I-405 HOV lanes. Motorcycles are allowed to use freeway HOV lanes as well.
historic property	A cultural resource that is on or eligible for listing on the National Register of Historic Places.
Interagency Committee for Outdoor Recreation (IAC)	The Office of the Interagency Committee for Outdoor Recreation was renamed the Recreation and Conservation Office (RCO) in July 2007.
jurisdiction	A municipal government agency, such as a city or county, and as appropriate, federal, and state agencies and federally recognized tribes. The term also can mean “to have authority over.”
Land and Water Conservation Fund Act (LWCFA)	Federal legislation adopted in 1965 that established the Land and Water Conservation Fund, a matching-fund assistance program that provides grants which pay half the acquisition and development cost of outdoor recreation sites and facilities. Section 6(f) of the act prohibits the conversion of property acquired or developed with these grants to a non-recreational purpose without the approval of the Department of the Interior (DOI), National Park Service. The DOI must ensure that replacement lands of equal value, location, and usefulness are provided as a condition of such conversions.
minimization	Taking measures to reduce potential effects to the smallest practical amount, extent, size, or degree. Minimization could include alignment shifts, a commitment to seasonal construction windows, replacement of land or facilities, restoration or landscaping, or payment of fair market value for affected lands.
mitigation (Section 4(f))	Within the context of a Section 4(f) analysis, an effort to replace land or facilities either with resources that are comparable in value and function, or with monetary compensation that can be used to enhance the remaining land or facilities. The cost of mitigation should be a reasonable public expenditure in light of the severity of the impact on the Section 4(f) resource.

Term	Meaning
modeling	Use of statistics and mathematical equations to simulate and predict real events and processes.
National Ambient Air Quality Standards (NAAQS)	Standards established by the Environmental Protection Agency under the Clean Air Act for pollutant concentrations in outside air throughout the country. See also: "criteria pollutants".
National Environmental Policy Act (NEPA)	Federal legislation adopted in 1969 that established a national environmental policy intentionally focused on federal activities and the desire for a sustainable environment balanced with other essential needs of present and future generations. NEPA also established federal agency responsibility and created the basic framework for integrating environmental considerations into federal decision-making. The fundamentals of the NEPA decision-making process include: an interdisciplinary approach in planning and decision-making for actions that affect the human environment, interagency coordination, consideration of alternatives, examination of potential environmental consequences and mitigation, documentation of the analysis, and making the information available to the public for comment prior to implementation.
National Historic Preservation Act (NHPA)	Federal legislation adopted in 1966 that requires federal agencies to consider the effects of their undertakings on historic properties and provide the Advisory Council on Historic Preservation with an opportunity to comment on such undertakings.
National Park Service (NPS)	An agency within the U.S. Department of the Interior, the NPS is charged with preserving the natural and cultural resources and values of the national park system for the enjoyment, education, and inspiration of current and future generations. The NPS is keeper of the National Register of Historic Places. Under Section 6(f) of the Land and Water Conservation Fund Act, the NPS also reviews land conversions for transportation projects.
National Register of Historic Places (NRHP)	Authorized under the National Historic Preservation Act of 1966, this is the Nation's official list of properties and other cultural resources that are recognized as deserving preservation. The National Register is administered by the National Park Service as part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect our historic and archaeological resources. Properties listed in the register include districts, sites, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and culture.

Term	Meaning
noise abatement criteria	The FHWA noise abatement criteria specify exterior and interior noise levels for various land activity categories such as residential and commercial. WSDOT considers a noise impact to occur if predicted equivalent hourly noise levels (Leq (h)) approach within 1 dBA of the noise abatement criteria.
noise level	The sound pressure level measured using a meter with an "A" frequency weighting and reported as dBA.
noise wall	A designed wall that provides a noise buffer between a noise source and adjacent residences or other sensitive noise receptors.
non-motorized	Bicycle, pedestrian, and other modes of transportation not involving a motor vehicle.
official with jurisdiction	The legal representative at the agency owning or administering a resource, unless the agency has delegated or relinquished this authority via formal agreement.
proximity effects	See "constructive use."
prudent	See "feasible and prudent."
publicly owned	Property that is owned and/or operated by a public entity. If a governmental body has a proprietary interest in the land (such as fee ownership, drainage easements or wetland easements), it can be considered publicly owned. Land subject to a public easement in perpetuity can also be considered to be publicly owned land for the purpose for which the easement exists.
Recreation and Conservation Office (RCO)	The Recreation and Conservation Office is a state agency that serves two boards: the Recreation and Conservation Funding Board and the Salmon Recovery Funding Board. The agency is charged with implementing policies and programs established by the boards, the legislature, and the Governor. The RCO administers state and federal grant programs for recreation and habitat conservation.
retaining wall	A structure used to hold earth in place where the natural grade cannot be maintained.

Term	Meaning
retention/detention pond	A drainage facility designed to reduce stormwater runoff quantity and quality effects either by holding the increased runoff volume that results from development for a considerable amount of time, allowing the suspended particles to settle out, and then slowly releasing it through natural means on site; or by holding the runoff for a short period of time and then releasing it to the stormwater management system for treatment and discharge.
right-of-way	Land purchased prior to the construction of transportation improvements along with land for sound walls, retaining walls, stormwater facilities, and other project features. This also includes permanent or temporary easements for construction and maintenance. Vacant land may also be set aside for future highway expansion under certain circumstances.
Section 106 of the National Historic Preservation Act	Under Section 106 of the Act, federal agencies must identify and evaluate cultural resources and consider how their undertakings affect historic properties eligible for inclusion in the National Register of Historic Places. See also: "National Historic Preservation Act".
Section 4(f) of the U.S. Department of Transportation Act	Section 4(f) of the U.S. Department of Transportation Act of 1966 (49 USC 303) declares as a national policy that a special effort be made to preserve the natural beauty of the countryside, including public park and recreation lands, wildlife and waterfowl refuges, and historic sites.
Section 6(f) of The Land Water Conservation Fund Act (LWCFA)	Section 6(f) of The Land Water Conservation Fund Act directs the Department of the Interior, National Park Service to assure that replacement lands of equal value, location, and usefulness are provided as conditions to approve conversions of lands that were acquired with LWCFA funding.
sensitive receptors	Land uses that are considered to have an increased susceptibility to noise effects, such as residences and schools.
significance	Within the context of a Section 4(f) analysis, an expression of whether a resource is considered important within the recreational, park, and refuge objectives of the community. Barring a determination from the official with jurisdiction to the contrary, the Section 4(f) resource is typically presumed to be significant.
simulation	An illustration based on photographs from selected viewpoints that portrays proposed project features and changes to the visual condition.

Term	Meaning
State Historic Preservation Officer (SHPO)	A governor-appointed position and, typically, a member of a state historic preservation agency, the SHPO reviews projects for compliance with Section 106 of the National Historic Preservation Act.
study area	The area specifically evaluated for environmental effects.
substantially impaired	The condition where the protected activities, features, or attributes of a natural resource are largely diminished.
temporary occupancy	Within the context of a Section 4(f) analysis, an entry on the land that is so minimal that it does not constitute a use within the meaning of Section 4(f). This is the case when the duration is temporary, the scope of work is minor, there are no anticipated permanent adverse physical effects, and the land will be fully restored. For this provision to apply, there must be documented agreement of the appropriate federal, state, or local officials having jurisdiction over the resource regarding the above conditions.
use	Within the context of a Section 4(f) analysis, use generally occurs when (1) land from a Section 4(f) site is acquired for a transportation project, (2) there is an occupancy of land that is adverse in terms of the statute's preservationist purposes, or (3) the proximity effect of the transportation project on the Section 4(f) site, without acquisition of land, is so great that the functions of the Section 4(f) site are substantially impaired.
vehicle	Any car, truck, van, motorcycle, or bus designed to carry passengers or goods. Bicycles and other pedestrian-oriented vehicles are not included in this definition.
viewers	People who have views of the project or resource. Viewers are usually discussed in terms of general categories of activities, such as resident, boater, jogger, or motorist. See also: viewer groups.
visual corridor	The changing views along the facility experienced by users.
visual quality	A subjective measure of the character of the visual resource. The many factors that contribute to a landscape's visual quality are grouped under intactness, unity, and vividness.
visual resources	The collection of all features and things that can be seen in an area.

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SECTION 1 INTRODUCTION

What are the primary features of the I-405 Tukwila to Renton Project?

WSDOT is proposing to construct the I-405, Tukwila to Renton Improvement Project (I-5 to SR 169 – Phase 2), referred to as the Tukwila to Renton Project, to relieve congestion. The Tukwila to Renton Project extends approximately four miles along I-405, from I-5 to SR 169, and approximately two miles along SR 167, from I-405 to SW 43rd Street. The project would:

- Add capacity to both I-405 and SR 167.
- Replace bridges over the Green River and Cedar River and add one new bridge over the Green River.
- Improve the SR 181 and SR 169 interchanges.
- Reconstruct the SR 167 interchange consisting of new general-purpose direct-connector ramp from I-405 southbound to SR 167 southbound, HOV direct-connector ramps from SR 167 northbound to I-405 northbound and from I-405 southbound to SR 167 southbound, and a split-diamond interchange at Lind Avenue and Talbot Road with connecting frontage roads.
- Reconstruct the two local street accesses to Renton Hill.

What is the purpose of this report?

This Draft Section 4(f) Evaluation identifies and evaluates project effects on public parks and recreation areas, historic sites, and wildlife and waterfowl refuges that are Section 4(f)-protected resources within the study area.

What is Section 4(f)?

Section 4(f) of the Department of Transportation Act (DOT) of 1966 (49 USC 303) prohibits the Federal Highway Administration (FHWA) from approving a transportation project that uses land from a significant public park, recreation area, wildlife or waterfowl refuge, or land of an historic site of national, state, or local significance, unless:

1. There is no feasible and prudent alternative
2. The project includes all possible planning to minimize harm to the property

What is feasible and prudent?

A term that is integral to the Section 4(f) process, feasible and prudent refers to the viability of an alternative that avoids the use of a Section 4(f) resource. The term "feasible" refers to the constructability of a project—whether or not it can be built using current construction methods, technologies, and practices. The term "prudent" refers to how reasonable the alternative is—in essence, whether or not it makes sense.

How do we minimize harm?

During the project's planning phases, we identify measures to reduce the potential effects to a resource. Minimization measures can include alignment shifts, a commitment to off-season construction, replacement of land or facilities; restoration, and/or landscaping.

A feasible and prudent alternative must be selected if it avoids using this land. Measures that minimize the harm to the resource must be identified and incorporated if use of the Section 4(f) resource is unavoidable.

An alternative may be rejected if it is not feasible and prudent. Alternatives will typically be rejected if they create unusual factors or costs or community disruption of an extraordinary magnitude. Examples include unacceptable social, economic, or environmental effects; serious community disruption; highway safety and geometric problems; or excessive construction costs. An accumulation of these problems (as opposed to a single factor) may be a sufficient reason to use a Section 4(f) resource. Excessive cost alone would not necessarily prevent an alternative from being considered prudent.

Identifying measures to reduce the potential effects to a resource is key during the project's planning phases. Minimization measures can include alignment shifts, a commitment to off-season construction, replacement of land or facilities, restoration, and/or landscaping.

A Section 4(f) Evaluation must be prepared if any resources protected by Section 4(f) are proposed for use by a project. The Section 4(f) evaluation:

- Describes the affected properties;
- Identifies the applicability or non-applicability of Section 4(f) to a property;
- Discusses the specific use(s) of the resources;
- Identifies and evaluates alternatives that avoid use of Section 4(f)-protected lands;
- Identifies measures to minimize harm resulting from unavoidable effects to Section 4(f) resources; and
- Includes coordination with officials having jurisdiction over or administering the lands that would be affected.

What are Section 4(f) resources?

The Code of Federal Regulations, 23 CFR 771.135, defines Section 4(f) resources using three categories:

1. Public parks and recreation areas, if they meet the following criteria:

- They must be publicly owned;
 - They must be open and available for use by the general public;
 - Their major purpose is for public recreation activities; and
 - They must be considered significant by the federal, state, or local official having jurisdiction over the facility.
2. Historic sites, if they are identified as properties of local, state, or national significance as determined by the federal, state, or local officials having jurisdiction over the site. Historic sites include properties on or eligible for the National Register of Historic Places (NRHP)¹.
 3. Wildlife or waterfowl refuges, if they are publicly-owned lands that have been set aside and designated for the protection of wildlife species and/or migratory birds.

What constitutes a “use” of Section 4(f) resources?

“Use” of Section 4(f) resources, as defined by the Act,² occurs when:

1. Land is permanently incorporated into a transportation facility. The physical and permanent procurement of a protected resource for use by a transportation project is known as an actual or direct use.
2. The land is subject to temporary occupancy and adverse changes, such as contour alterations or removal of mature trees and other vegetation as may result during project construction. Temporary occupancy during construction will not always

¹ The NRHP is the nation’s official list of cultural resources worthy of preservation. Authorized under the National Historic Preservation Act of 1966, the National Register lists historic and archaeological resources such as districts, sites, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and culture.

² 23 CFR 771.135(p) (1) and (2) is where DOT specifically describes Section 4(f) “use.”

constitute a use of Section 4(f) land. Short-term, temporary occupancy or impact (e.g., for a construction easement) does not constitute a use under Section 4(f) as long as all of the following conditions are met:

- Occupancy is temporary (i.e., shorter than the construction period for the entire project) and ownership does not change;
- Changes are minimal;
- No permanent adverse physical effects result and there is no interference with the activities or purposes of the resource on either a temporary or permanent basis;
- The land being used is restored to a condition which is at least as good as that prior to the project; and
- Documented agreement(s) exist between relevant jurisdictions regarding temporary use of the resource.

3. There is a constructive use of land. A constructive use is a type of indirect use in which a transportation project's proximity effects (as opposed to direct effects) are so severe that the protected activities, features, or attributes that qualify a resource for protection under Section 4(f) are substantially impaired. Examples include excessive noise level increases, diminished aesthetic features, ecological intrusions, and other indirect effects to the resource's environment or utility. In all instances, a "substantial impairment" of the resource is necessary for a constructive use to occur.

A constructive use occurs when:

- Noise from the project substantially interferes with the use and enjoyment of the resource, such as enjoyment of a historic site where a quiet setting is a generally recognized feature or attribute of the site's significance, or enjoyment of any park where serenity and quiet are significant attributes. The noise increase must not only be detectable to the human ear (i.e., an increase greater than 2 to 3 decibels) and exceed the FHWA noise abatement criterion as contained in Table 1 of 23 CFR Part 772,

but it must be severe enough to truly impair enjoyment of the Section 4(f) resource; or

- The proximity of the proposed project substantially impairs aesthetic features or attributes of the resource, where these features or attributes are considered important contributing elements to the value of the resource. An example might be the location of a roadway that obstructs or eliminates a view or substantially detracts from the setting of a park or historic site that derives its value in substantial part due to its setting; or
- The project restricts access and would result in a substantial decrease in the usability of the resource; or
- Vibration emanating from the project substantially impairs the use of the resource.

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SECTION 2 PROJECT DESCRIPTION

What is the intent of the Tukwila to Renton Project?

The I-405 Corridor Program Final Environmental Impact Statement and Final Preliminary Section 4(f) Evaluation (August 2002) analyzed four build alternatives and the No Build Alternative. The alternatives analysis found that no other feasible and prudent alternative is more effective than the Preferred Alternative in minimizing potential harm to Section 4(f) resources.

This Draft Section 4(f) Evaluation is a follow on document to the I-405 Corridor Program and analyzes effects to Section 4(f) resources at the project level for the Tukwila to Renton project, which is a phase of the I-405 Corridor Program.

WSDOT is proposing to construct the I-405, Tukwila to Renton Improvement Project (I-5 to SR 169 – Phase 2), referred to as the Tukwila to Renton Project, to relieve congestion. Relieving congestion would benefit the public by:

- Lowering the number of accidents thus improving safety.
- Increasing overall speeds through this section of freeway.
- Improving response times for emergency service vehicles using I-405.
- Improving access to and from I-405 and local circulation.

The Tukwila to Renton Project extends approximately four and one half miles along I-405, from I-5 to SR 169, and approximately two miles along SR 167, from I-405 to SW 43rd Street. The project adds capacity to both I-405 and SR 167; improves the SR 181 and SR 169 interchanges; reconstructs the SR 167 interchange consisting of a split-diamond interchange at Lind Avenue and Talbot Road with connecting frontage roads, general-purpose direct-connector ramp from I-405 to SR 167 southbound, and high-occupancy vehicle (HOV) direct-connector ramps from SR 167 northbound to I-405 northbound and from I-405 southbound to SR 167 southbound. These improvements are detailed in the following section.

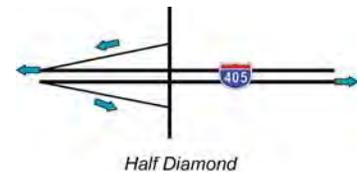
What is a split-diamond interchange?

This interchange type consists of two half-diamond interchanges at arterials. These are connected by two, one-way frontage roads. Traffic enters and exits the freeway at the two arterials, creating an elongated diamond configuration as shown.



What is a half-diamond interchange?

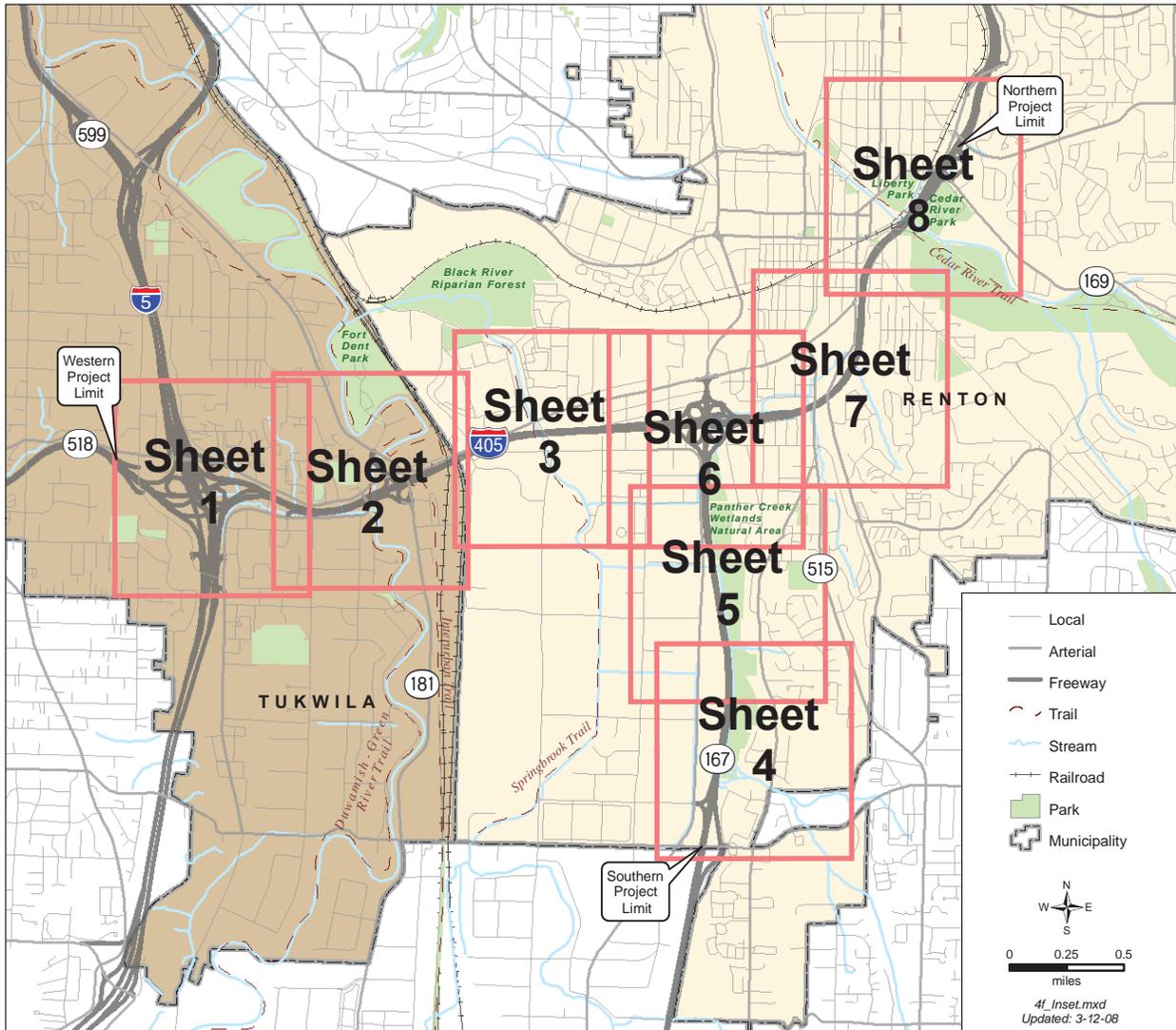
It is an interchange where traffic exits or enters the freeway in one direction. This creates a triangular or half-diamond configuration as shown.



What are the details of the Tukwila to Renton Project?

The Tukwila to Renton Project improvements are described from west to east (northbound) along the study area on the following pages. These improvements are also illustrated on Exhibits 2-0 through 2-15. Exhibit 2-0 illustrates how the project length has been divided for discussion and is a larger version of the inset on the full page maps.

Exhibit 2-0: Sheet Layout along Project Length



I-405, TUKWILA TO RENTON IMPROVEMENT PROJECT (I-5 TO SR 169 - PHASE 2)
 DRAFT SECTION 4(f) EVALUATION

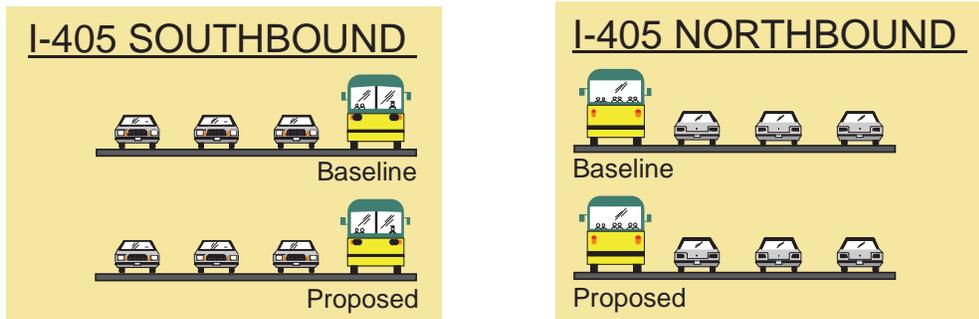
Exhibit 2-1: Project Features, Sheet 1



I-405 from I-5 to East of SR 181

For this portion of the project, WSDOT would:

- Remove the existing northbound I-405 Tukwila Parkway on-ramp. See Exhibits 2-2 and 2-3 for where the project would provide a new on-ramp.
- Realign I-405 mainline slightly to the south beginning just west of the existing northbound I-405 Tukwila Parkway on-ramp to the SR 181 interchange as shown in Exhibits 2-0 and 2-2.



The project would not change capacity along this section

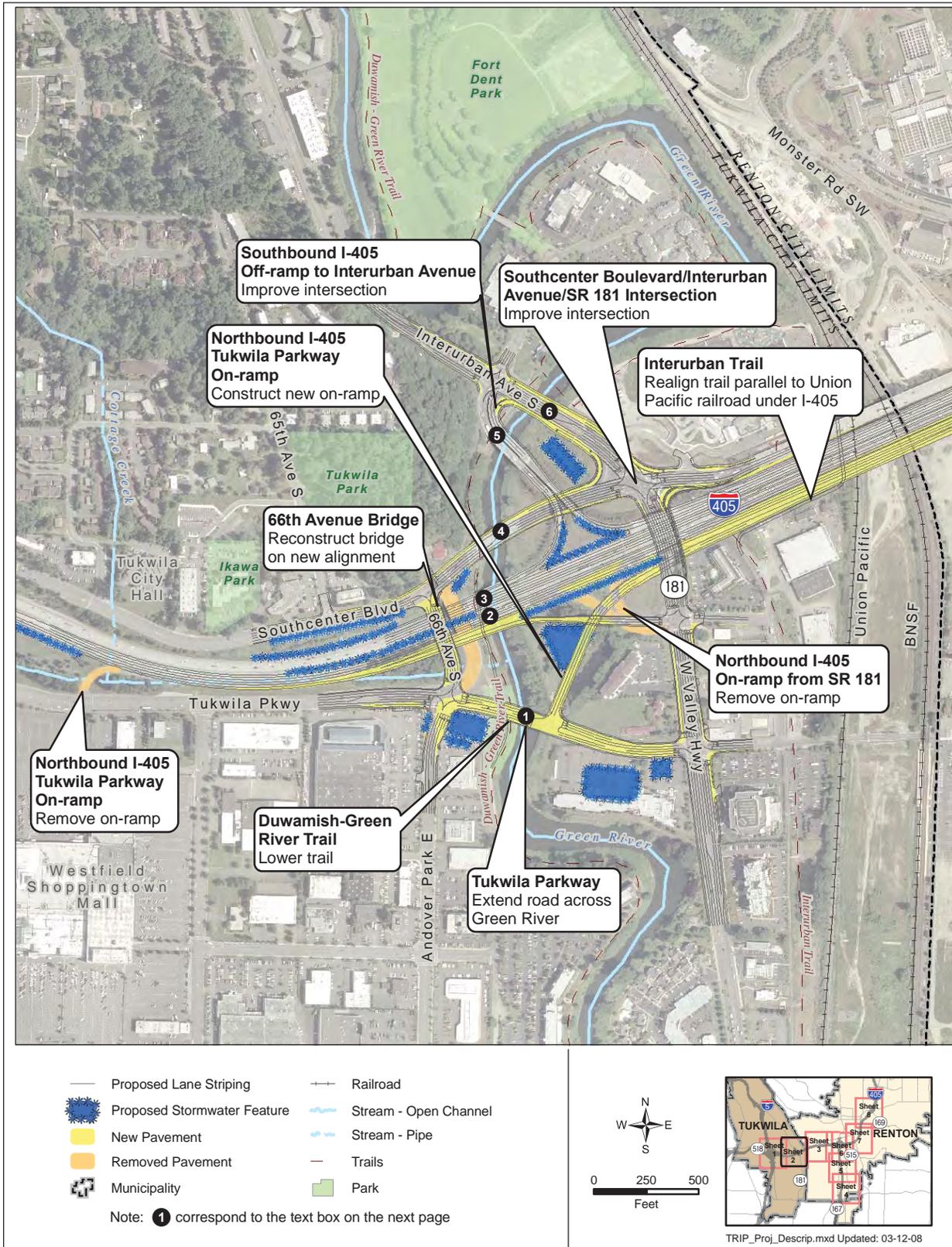
What are baseline conditions for this project?

Baseline conditions describe the site conditions just before construction of the project begins. This can include the build conditions of earlier phased projects that are already approved and funded and expected to be complete before the next project begins. Baseline provides an important point of comparison for understanding the effects of the proposed build alternative.

For the Tukwila to Renton Project, the baseline condition assumes that the Renton Nickel Improvement Project has been completed.

I-405, TUKWILA TO RENTON IMPROVEMENT PROJECT (I-5 TO SR 169 - PHASE 2)
 DRAFT SECTION 4(f) EVALUATION

Exhibit 2-2: Project Features, Sheet 2



I-405 at SR 181 Interchange

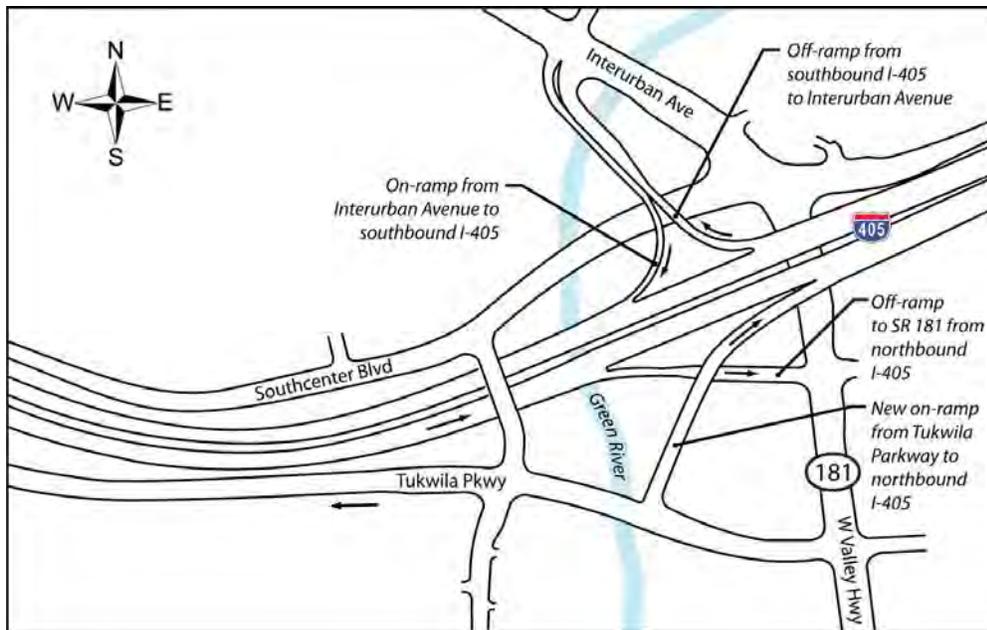
WSDOT designed the improvements in Exhibits 2-2 and 2-3 to improve freeway and local travel in this area. WSDOT would:

- Improve the SR 181 interchange:
 - Remove the existing SR 181 on-ramp to northbound I-405.
 - Extend Tukwila Parkway from the intersection with 66th Avenue east over the Green River to SR 181.
 - Construct new northbound I-405 on-ramp from Tukwila Parkway just east of the new crossing over the Green River (replaces the two existing on-ramps).
 - Reconstruct the 66th Avenue S bridge over I-405 on a new alignment to the west and reconstruct the intersections with Southcenter Boulevard and Tukwila Parkway.
 - Reconstruct the off-ramp from northbound I-405 to SR 181.
 - Improve local arterials within the interchange area such as Southcenter Boulevard and Interurban Avenue.
- Reconstruct five bridges and build one new bridge over the Green River.
- Lower the Duwamish-Green River Trail.
- Reconstruct the I-405 structures over SR 181.
- Realign the Interurban Trail.

What bridge construction would occur over the Green River?

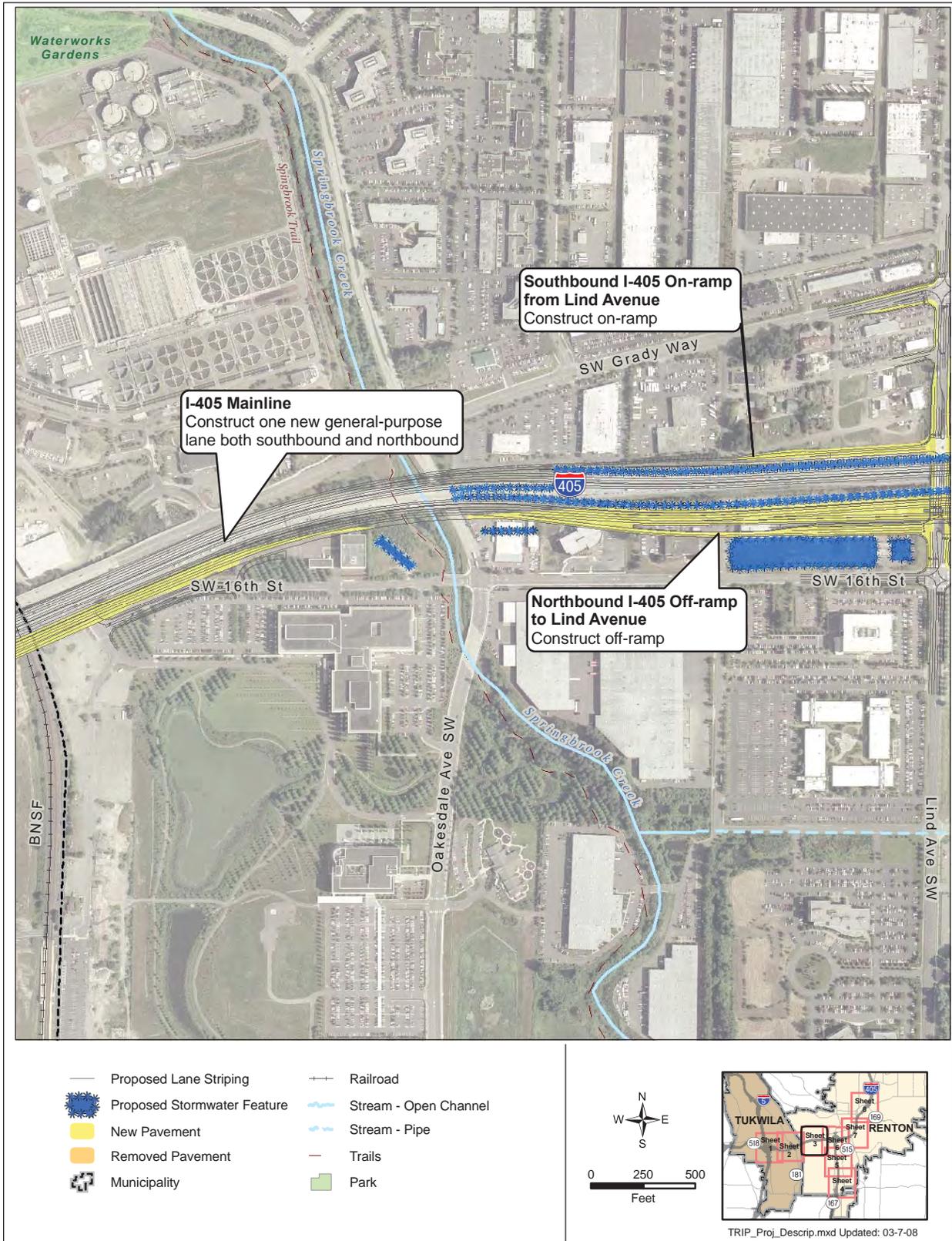
- ① Tukwila Parkway Bridge (new)
 - ② Northbound I-405 Bridge
 - ③ Southbound I-405 Bridge
 - ④ Southcenter Boulevard Bridge
 - ⑤ Off-Ramp Bridge from southbound I-405.
 - ⑥ Interurban Avenue Bridge
- See Exhibit 2-2 for the bridge locations.

Exhibit 2-3: SR 181 Interchange Improvements



I-405, TUKWILA TO RENTON IMPROVEMENT PROJECT (I-5 TO SR 169 - PHASE 2)
 DRAFT SECTION 4(f) EVALUATION

Exhibit 2-4: Project Features, Sheet 3



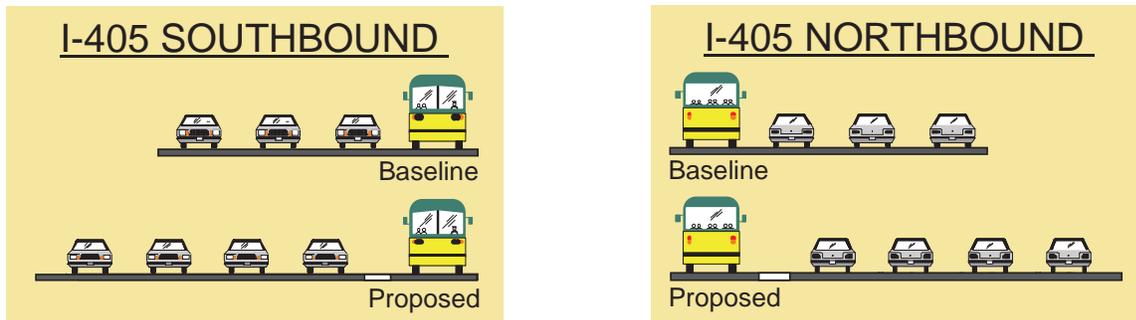
I-405 from East of SR 181 to SR 167 Interchange

From the SR 181 interchange east, WSDOT would realign I-405 to the south. This would:

- Provide a smooth transition onto the new Springbrook Creek/Oakesdale Avenue bridge that was constructed under the Renton Nickel Improvement Project.
- Minimize effects on SW Grady Way and businesses north of I-405.

In addition to realigning I-405, WSDOT would:

- Construct one additional general-purpose lane in both directions on I-405 from SR 181 through SR 167.
- Stripe lanes to provide a buffer between HOV and general-purpose lanes along I-405.

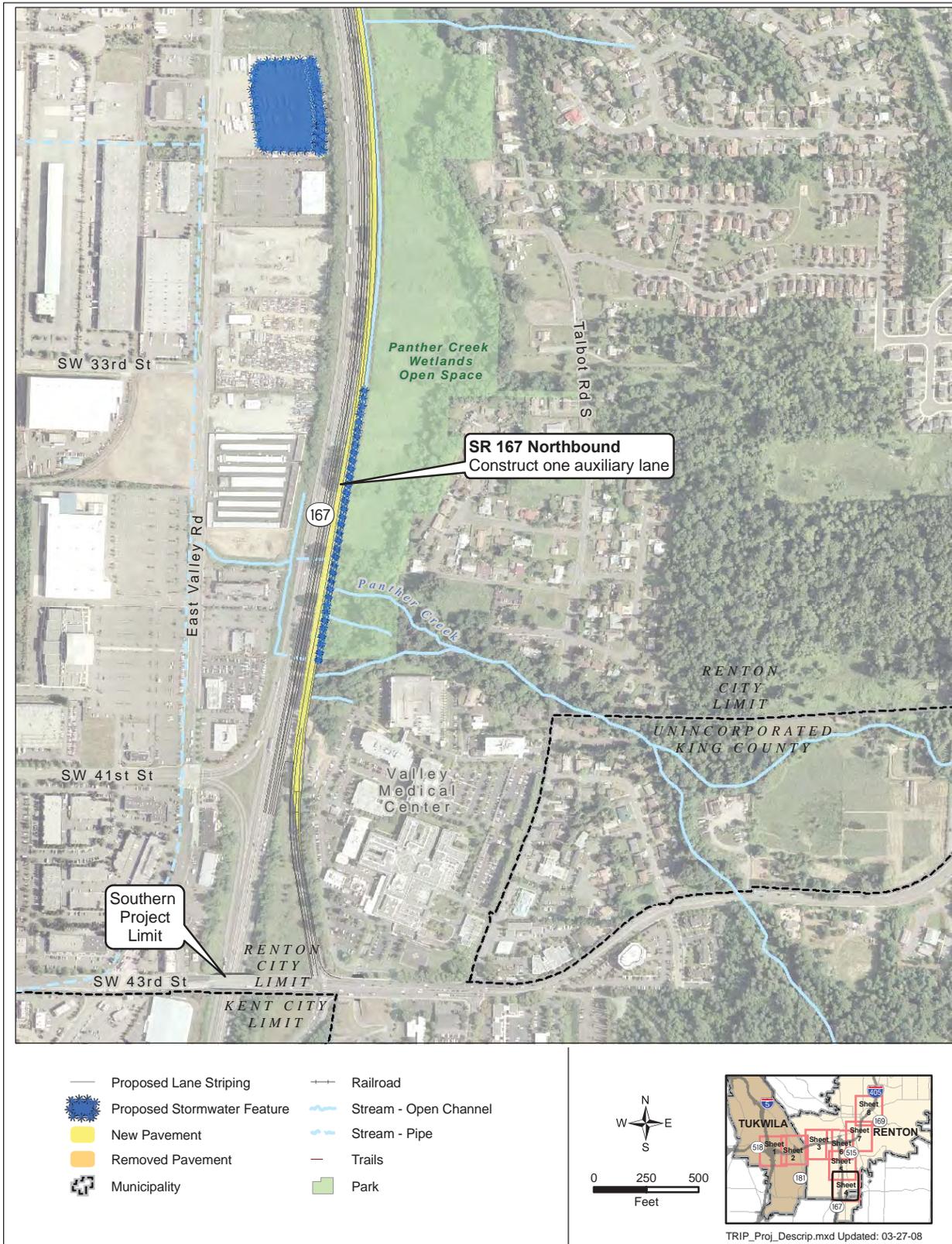


Project improvements would add capacity to I-405 for both southbound and northbound traffic and would provide a buffer between the HOV lane and the general-purpose lanes

- Stripe the bridges over Springbrook Creek/Oakesdale Avenue to provide five lanes in both directions.
- Reconstruct I-405 structures over the Burlington Northern Santa Fe (BNSF) and Union Pacific railroads.
- Construct a half-diamond interchange at Lind Avenue (see sidebar on page 2-1).

I-405, TUKWILA TO RENTON IMPROVEMENT PROJECT (I-5 TO SR 169 - PHASE 2)
 DRAFT SECTION 4(f) EVALUATION

Exhibit 2-5: Project Features, Sheet 4

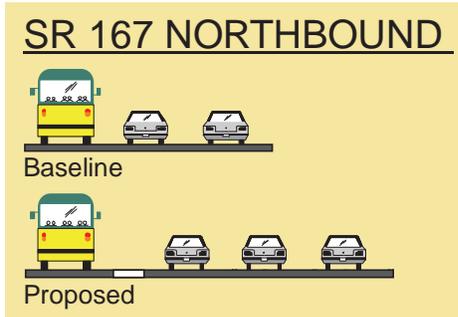


SR 167 from SW 43rd Street On-ramp North to SW 27th Street

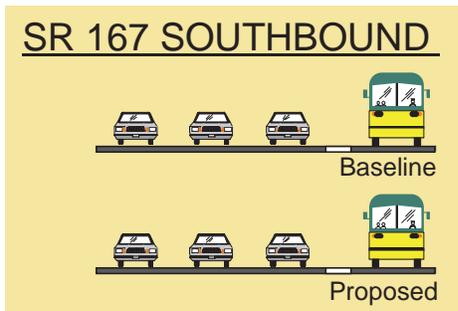
In this area, WSDOT would:

- Construct an auxiliary lane on northbound SR 167 from SW 43rd Street to SW 27th Street.
- Stripe lanes to provide a buffer between HOV and general-purpose lanes along northbound SR 167.

As shown on Exhibit 2-5, the new northbound lane would be added north of the SW 43rd Street on-ramp. This would improve the ability of traffic to merge onto SR 167 and increase capacity along this stretch. To minimize effects on the streams and wetlands along SR 167, WSDOT has used retaining walls instead of fill slopes.



Project Improvements would add capacity to northbound SR 167 and would provide a buffer between the HOV lane and the general-purpose lanes



The project would not affect the southbound lanes of SR 167

What is an auxiliary lane?

An auxiliary lane is a lane added between interchanges—from one on-ramp to the next off-ramp. It is dedicated to traffic entering and leaving the freeway and provides motorists with more time and extra room to accelerate or decelerate and merge when getting on and off the freeway.

The signs below show how an auxiliary lane changes how an on-ramp operates.



I-405, TUKWILA TO RENTON IMPROVEMENT PROJECT (I-5 TO SR 169 - PHASE 2)
 DRAFT SECTION 4(f) EVALUATION

Exhibit 2-6: Project Features, Sheet 5

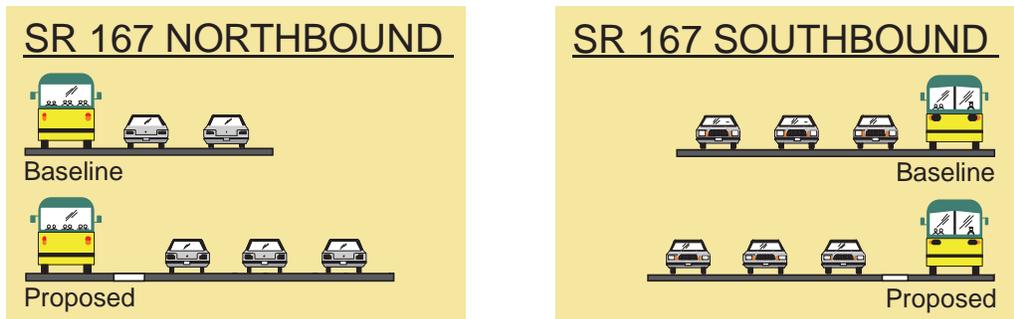


SR 167 from SW 27th Street to I-405

Along this section of SR 167, the project would:

- Reconstruct SR 167 between SW 27th Street and I-405 to accommodate the reconstructed SR 167 interchange as shown on Exhibits 2-7 to 2-9.
- Reconstruct East Valley Road to the west of its current alignment between SW 23rd Street and SW 16th Street to accommodate the reconstructed SR 167 interchange.
- Stripe lanes to provide a buffer between HOV and general-purpose lanes along SR 167.
- Construct an auxiliary lane on northbound SR 167 from SW 27th Street to I-405.

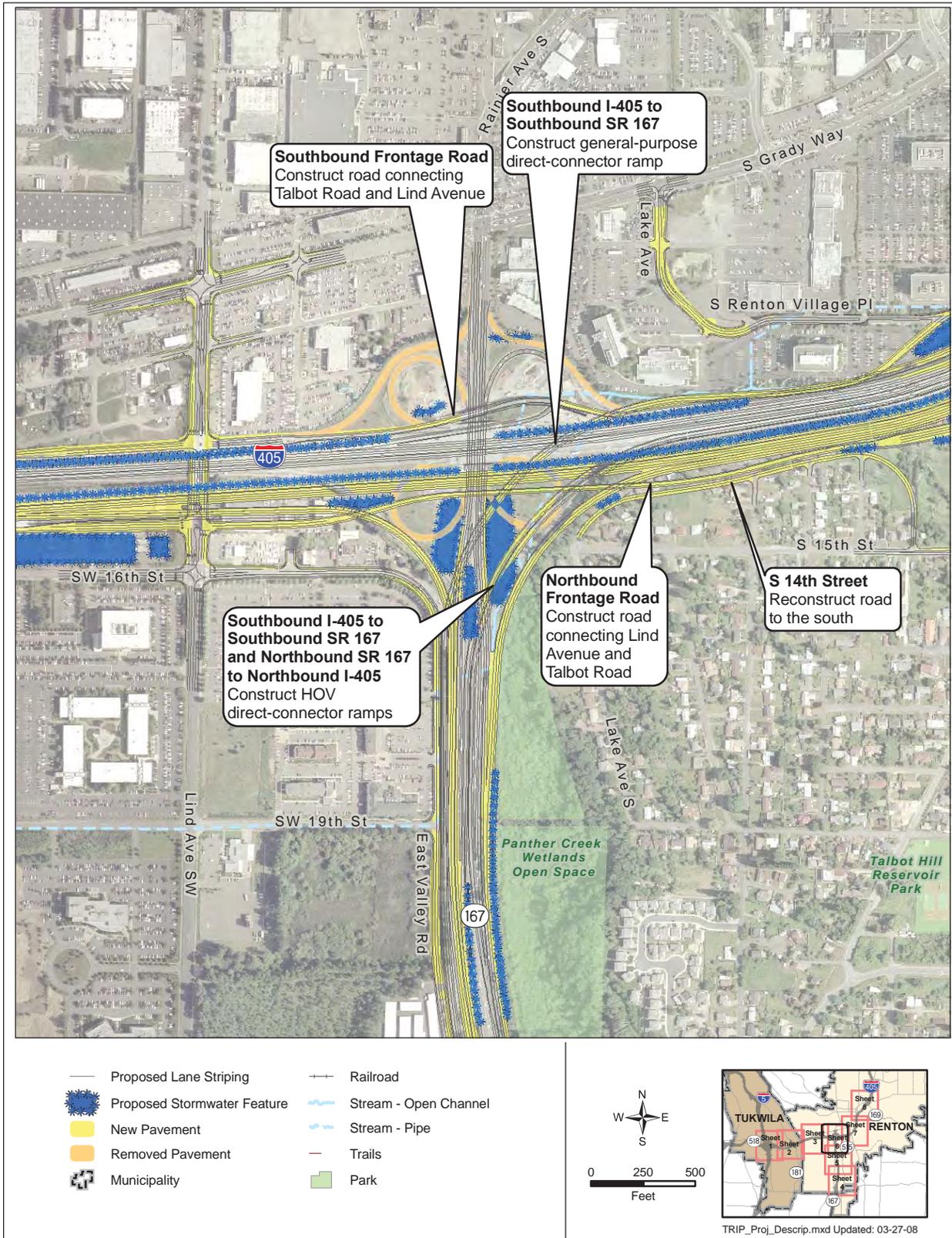
WSDOT has designed the improvements in this area to the west as much as possible to minimize effects on the Panther Creek wetlands while also limiting the effects on businesses west of SR 167. To further minimize the area needed to accommodate the improvements, the new southbound I-405 to southbound SR 167 direct-connector ramp would be built over local street and freeway improvements as shown on Exhibit 2-9. WSDOT also used design features such as retaining walls to minimize the area needed for improvements.



Project improvements would add capacity to northbound SR 167 and would provide a buffer between the HOV lane and the general-purpose lanes in both the northbound and southbound directions of SR 167

I-405, TUKWILA TO RENTON IMPROVEMENT PROJECT (I-5 TO SR 169 - PHASE 2)
 DRAFT SECTION 4(f) EVALUATION

Exhibit 2-7: Project Features, Sheet 6



I-405 Interchange with SR 167

Within the I-405/SR 167 interchange, the project would improve freeway to freeway access and local access.

Freeway to Freeway Access

To improve access, WSDOT would:

- Construct a general-purpose direct-connector ramp from southbound I-405 to southbound SR 167, replacing the existing loop ramp.
- Reconstruct exterior ramps from northbound I-405 to southbound SR 167 and from northbound SR 167 to northbound I-405, replacing the existing ramps. This project would also add a general-purpose lane to both ramps.
- Construct HOV direct-connector ramps from southbound I-405 to southbound SR 167 and from northbound SR 167 to northbound I-405.
- Maintain existing loop ramp from northbound SR 167 to southbound I-405.

Exhibit 2-8 focuses on the freeway to freeway interchange improvements and Exhibit 2-9 presents how these improvements would look.

Exhibit 2-8: Freeway to Freeway Ramps in Reconstructed I-405/SR 167 Interchange

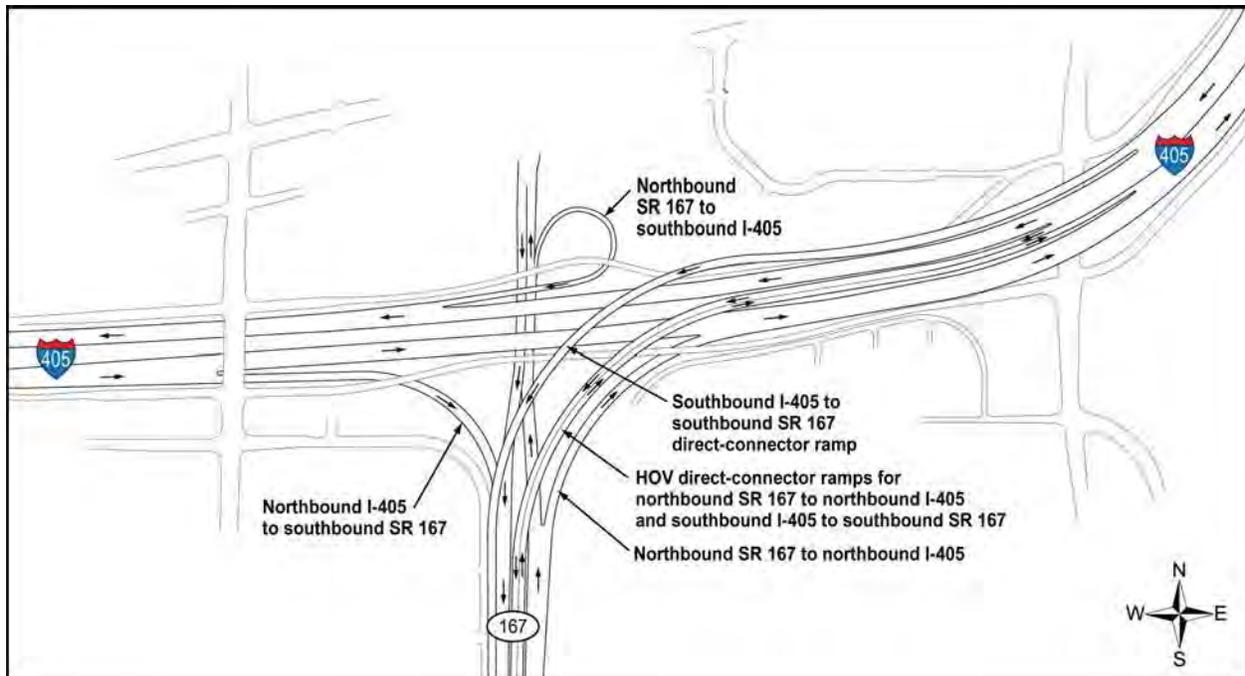


Exhibit 2-9: Rendering of I-405/SR 167 Interchange Improvements

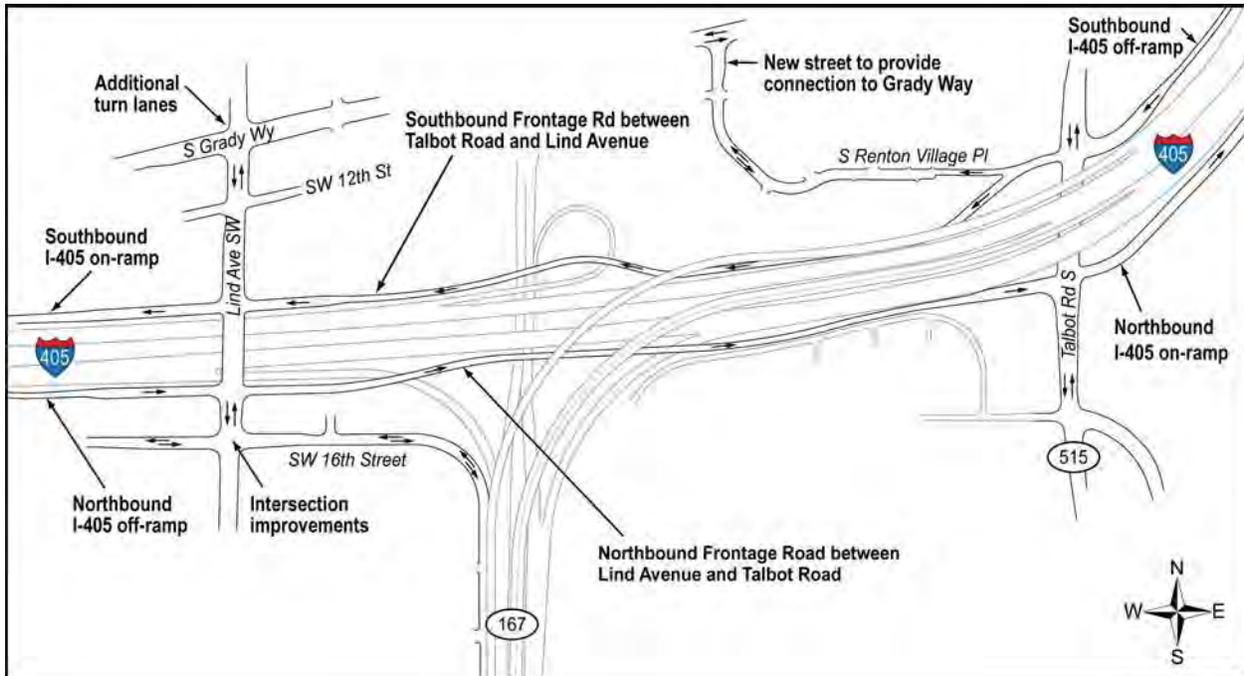


Local Access

WSDOT would improve local access at the SR 167 interchange. The improvements would:

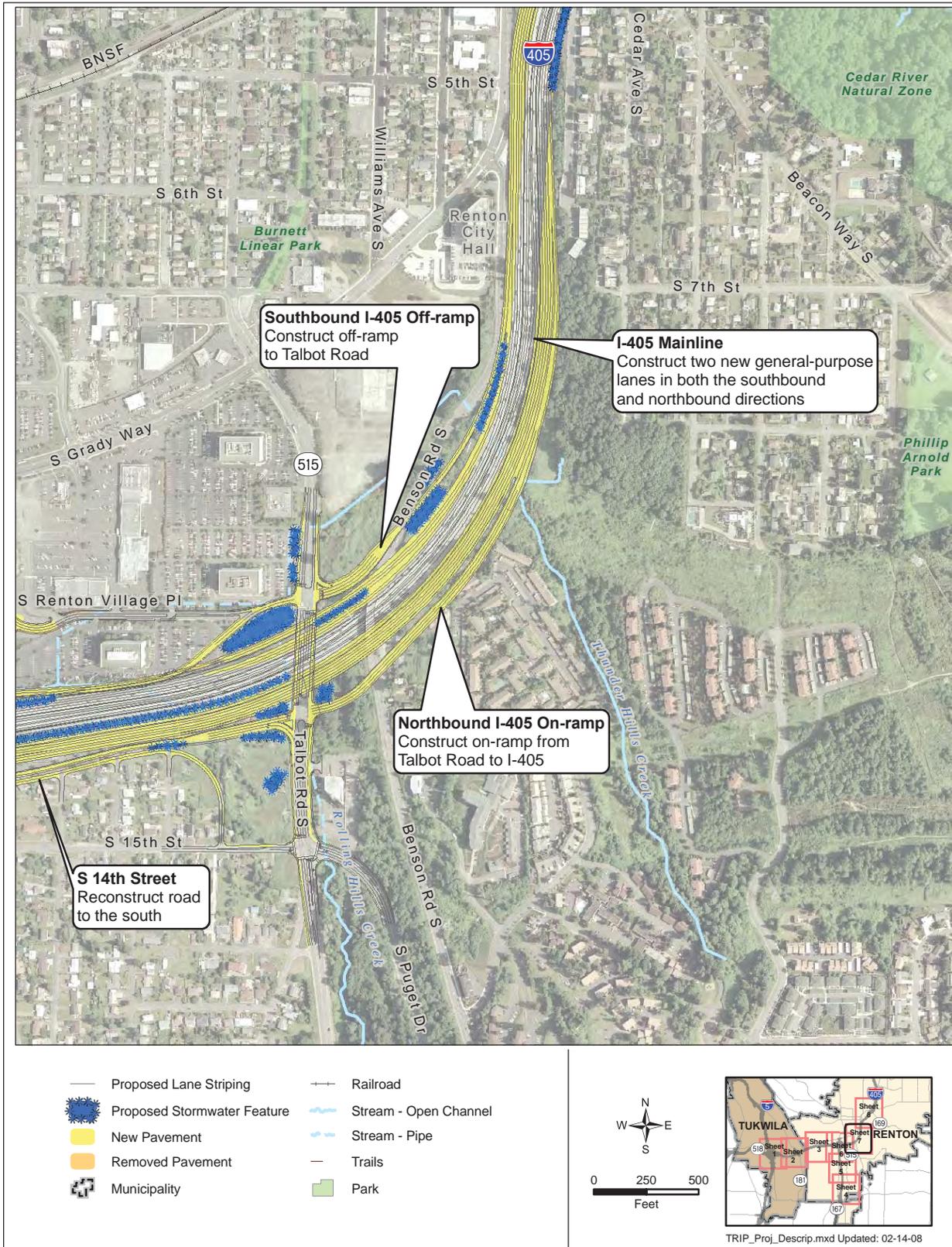
- Construct a split-diamond interchange at Lind Avenue and Talbot Road (SR 515). See Exhibits 2-10 and 2-11.
- Construct southbound and northbound frontage roads connecting Lind Avenue and Talbot Road. The southbound frontage road would reuse the existing I-405 to SR 167 southbound bridge.
- Reconstruct the Lind Avenue bridge over I-405.
- Reconstruct the I-405 structures over Talbot Road.
- Improve local street intersections.
- Provide new connection to Grady Way from S Renton Village Place.

Exhibit 2-10: Split-diamond Interchange at Lind Avenue and Talbot Road



I-405, TUKWILA TO RENTON IMPROVEMENT PROJECT (I-5 TO SR 169 - PHASE 2)
 DRAFT SECTION 4(f) EVALUATION

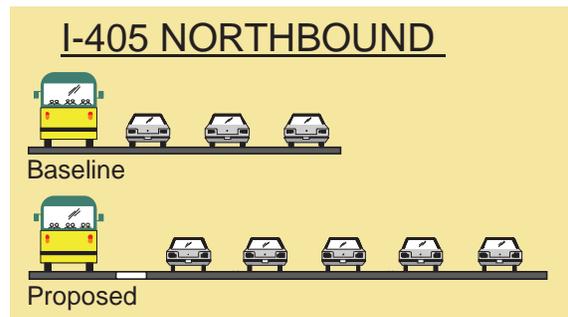
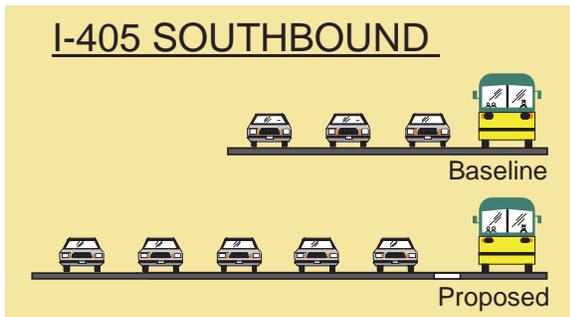
Exhibit 2-11: Project Features, Sheet 7



I-405 from East of SR 167 Interchange to North of S 5th Street

For the section of I-405 that extends from the SR 167 interchange past Renton City Hall as shown on Exhibit 2-11, WSDOT would:

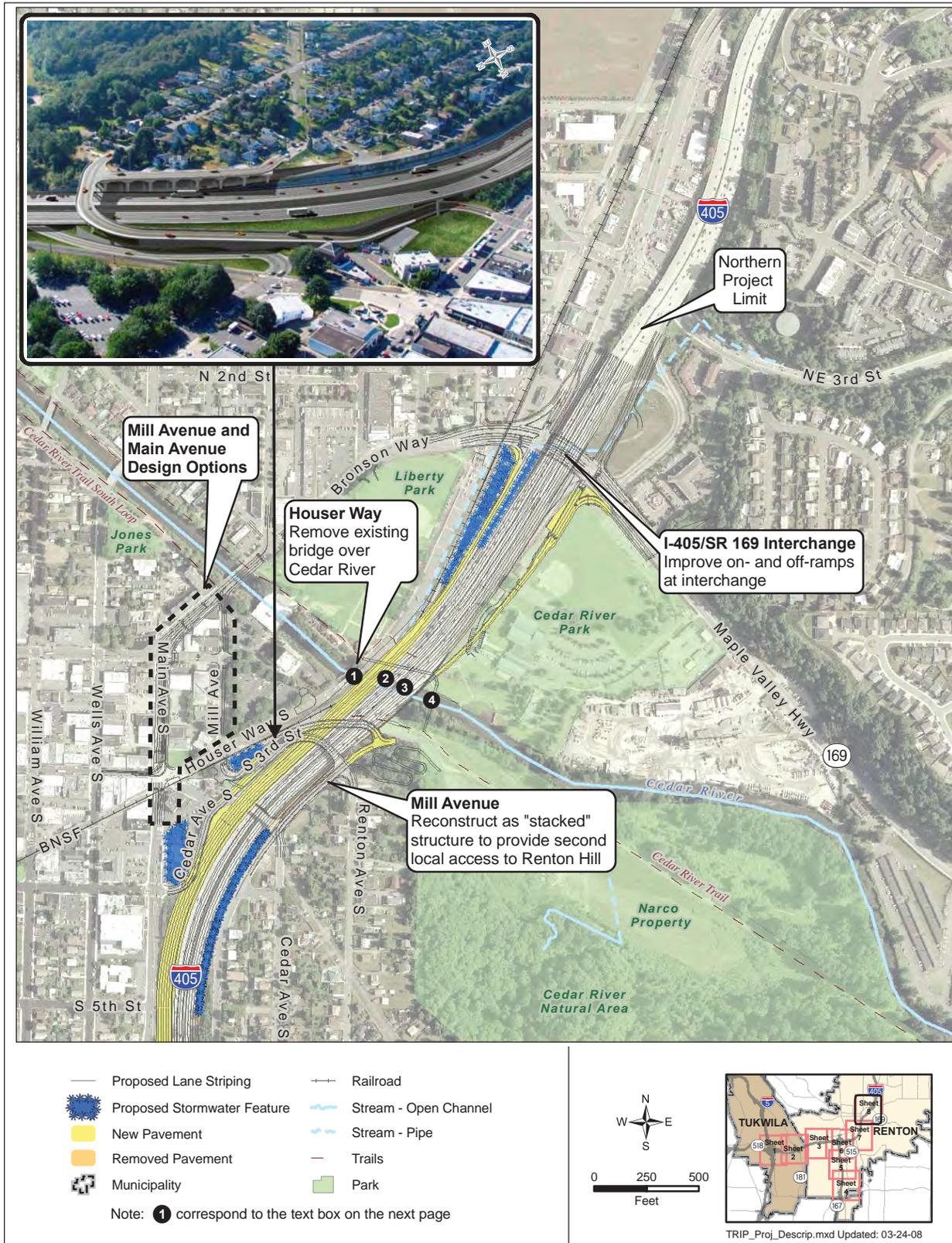
- Construct two additional lanes in both directions on I-405 from SR 167 through SR 169.
- Stripe lanes to provide a buffer between HOV and general-purpose lanes along I-405.
- Construct a new half-diamond interchange at Talbot Road as shown on Exhibit 2-10.
- Reconstruct S 14th Street south of its existing location.



Project improvements would add capacity to I-405 for both southbound and northbound traffic and would provide a buffer between the HOV lane and the general-purpose lanes

I-405, TUKWILA TO RENTON IMPROVEMENT PROJECT (I-5 TO SR 169 - PHASE 2)
 DRAFT SECTION 4(f) EVALUATION

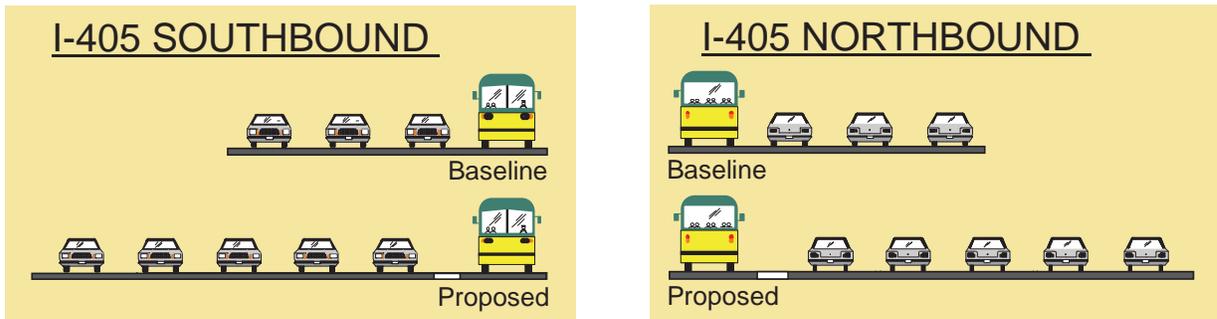
Exhibit 2-12: Project Features, Sheet 8



I-405 from S 5th Street to SR 169

This last portion of the Tukwila to Renton Project crosses the Cedar River to the SR 169 interchange. In this section, WSDOT would:

- Construct two additional lanes in both directions on I-405 from SR 167 through SR 169.
- Stripe lanes to provide a buffer between HOV and general-purpose lanes along I-405.



Project improvements would add capacity to I-405 for both southbound and northbound traffic and would provide a buffer between the HOV lane and the general-purpose lanes

- Cantilever the I-405 structures over Main Avenue.
- Reconstruct three bridges over the Cedar River: southbound I-405, northbound I-405, and a pedestrian bridge.
- Relocate the Burlington Northern Santa Fe railroad bridge.
- Close Houser Way south of the Cedar River north to Bronson Way and remove the bridge over the Cedar River.
- Reroute northbound traffic to Bronson Way, which would be striped to accommodate the new traffic pattern.
- Reconstruct two local street accesses to Renton Hill.

What bridge construction would occur over the Cedar River?

- ❶ Burlington Northern Santa Fe Railroad Bridge
 - ❷ Southbound I-405 Bridge
 - ❸ Northbound I-405 Bridge
 - ❹ Pedestrian Bridge
- See Exhibit 2-12 for the bridge locations.

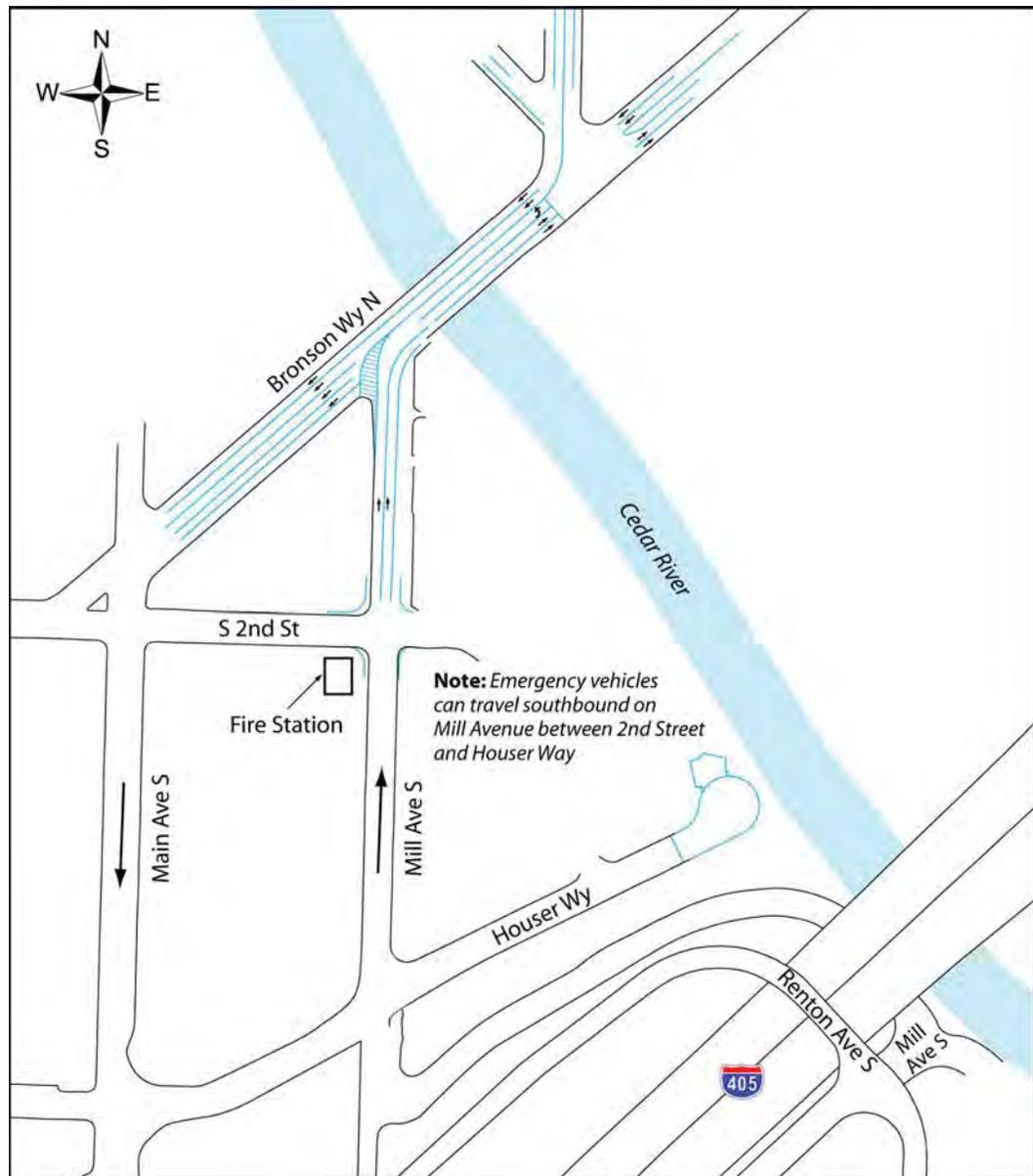
To accommodate the I-405 improvements, the Tukwila to Renton Project also required rerouting traffic from Houser Way and changing access to Renton Hill. These improvements are discussed on the following pages.

Mill Avenue and Main Avenue Design Options

To accommodate widening I-405 over the Cedar River, the Houser Way bridge would be closed. WSDOT worked closely with the City of Renton to develop the most acceptable and feasible solution for redirecting traffic coming from south of Houser Way. For northbound traffic within Renton south of the Cedar River, two design options are being considered:

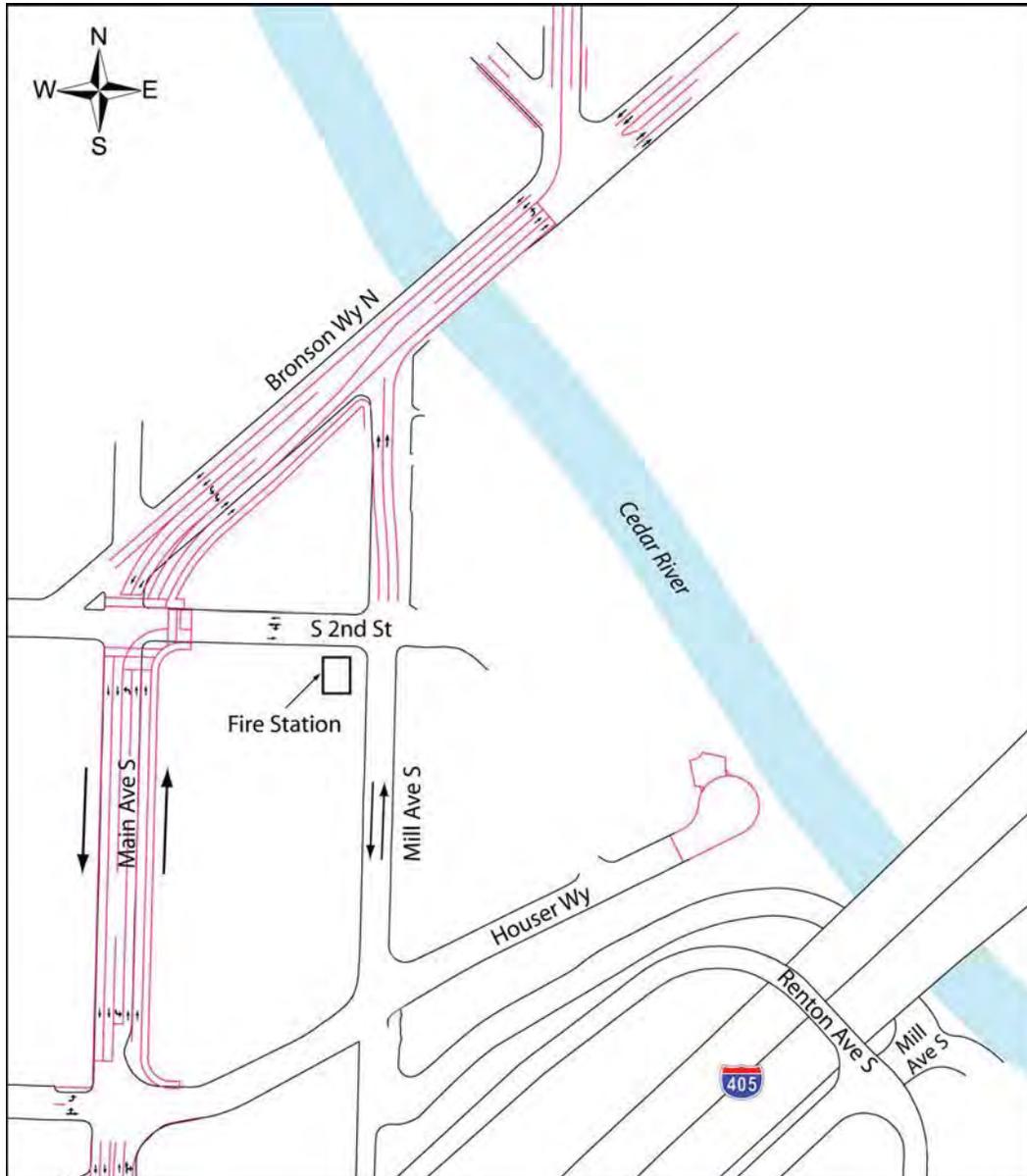
- The first option stripes Mill Avenue as a one-way street to provide two lanes northbound from the intersection of Houser Way and Mill Avenue to Bronson Way (see Exhibit 2-13).

Exhibit 2-13: Mill Avenue Design Option for Local Access to Bronson Way



- The second option leaves Mill Avenue as a two-way street up to the intersection with 2nd Street where it would be striped for one-way traffic northbound and reconfigures Main Avenue, a one-way street southbound, to provide two-way traffic. Main Avenue would be widened and striped for two-way traffic to provide access from the south to Bronson Way (see Exhibit 2-14).

Exhibit 2-14: Main Avenue Design Option for Local Access to Bronson Way

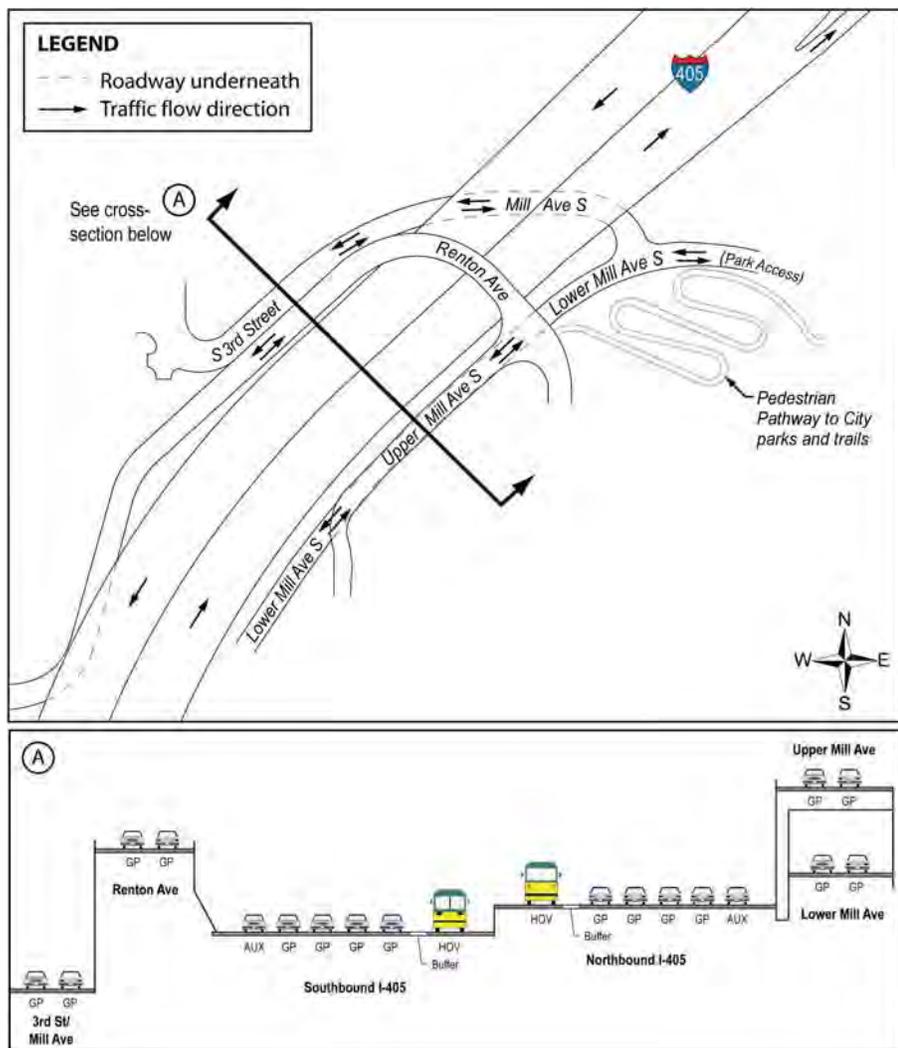


Changes to Renton Hill Access

As shown in the inset on Exhibit 2-12, the Renton Hill Access would be changed to accommodate the widening of I-405. These changes are detailed in Exhibit 2-15 below. WSDOT would:

- Reconstruct the Renton Avenue bridge over I-405 and realign the north end to intersect with Main Avenue rather than Houser Way as it currently does.
- Reconstruct Mill Avenue as a stacked structure that also provides access to Renton Hill as shown in Exhibit 2-15.
- Remove the existing Cedar Avenue bridge.
- Construct a pedestrian pathway connecting residents on Renton Hill to the City's parks and trails.

Exhibit 2-15: New Local Access for Renton Hill



What are the construction methods and schedule for implementation?

Construction Methods

The Tukwila to Renton Project would use different methods to construct the various project elements. The main approaches to construction for this project are described below.

At-grade Construction

At-grade construction, which occurs on the same elevation as the existing lanes, would be staged to minimize traffic delays and detours. One method would shift lanes toward the median. WSDOT then would place a concrete barrier to provide a work zone outside of the roadway. A second method would build the entire new section, then shift traffic to the new portion and reconstruct the existing section. Staging allows construction to occur safely without closing lanes for the duration of construction.

Bridge Construction

Bridge construction would generally occur in multiple stages to minimize traffic delays and detours. The following describes a typical staging approach for bridge construction on I-405 that would be used where practicable. As the first step, traffic is shifted toward the I-405 median, and the existing lanes and shoulders are narrowed slightly. This approach allows widening of the existing structure or construction of the new bridge, depending on the design, to occur on the outside of the roadway. Next, traffic is shifted onto the new bridge area. If the bridge is being replaced rather than simply widened, the old structure is demolished after traffic is shifted to the new bridge.

Road Closures

Some road closures would be necessary to construct various improvements. WSDOT would notify local agencies, public services, utilities, and the general public prior to any temporary road closures and would clearly mark detour routes. As much as possible, closures would be scheduled during times that would have the least impact on the traveling public.

Traffic Control

WSDOT would work with local agencies to develop detours as needed during construction. Prior to starting construction, WSDOT would develop a traffic control plan. The plan's primary objectives would be to provide a safe facility, to streamline the construction schedule, and to minimize reductions to existing traffic capacity. To lessen effects on traffic, the duration of activities would be minimized and reductions in capacity would be limited and would be targeted to a period when they would have the least effect.

Schedule

Because the I-405 Corridor Program master plan configuration is very expensive, WSDOT would implement the improvements in phases as funding becomes available. The Tukwila to Renton Project represents Phase 2 for this section of I-405. This discipline report assumes a baseline condition where the Phase 1 improvements, Renton Nickel Improvement Project, have been completed prior to the start of Phase 2.

Construction of the entire Tukwila to Renton Project is expected to be spread over several years as funding becomes available. For this reason, construction activity would not be constant throughout the entire study area and the duration would vary depending on the improvement being constructed.

The first element of the Tukwila to Renton Project that is proposed for construction is the SR 515 Interchange Project. This portion is funded through the 2005 Transportation Partnership Account (TPA). This Tukwila to Renton project element would construct a half-diamond interchange on I-405 at Talbot Road (SR 515). Construction of this element is scheduled to begin in autumn of 2008. The remaining elements of the Tukwila to Renton Project are unfunded at this time.

To complete the master plan for I-405 from I-5 to SR 169, additional work would need to be accomplished in this area.

Does this project relate to any other improvements on I-405 or connecting highways?

The Tukwila to Renton Project is part of a comprehensive program to address the congestion problems in the I-405 corridor. WSDOT worked with the Federal Highway Administration (FHWA), Federal Transit Administration, Central Puget Sound Regional Transit Authority, King County, and local governments to develop strategies to reduce traffic congestion and improve mobility along the I-405 corridor. The I-405 Corridor Program Environmental Impact Statement (EIS) and Record of Decision (ROD), published in 2002, document these strategies. The selected alternative has become known as the master plan.

WSDOT is constructing the master plan as funding becomes available. For the southern end of I-405 extending from I-5 to SR 169, the Renton Nickel Improvement Project was Phase 1. This phase was largely funded by the statewide transportation-funding plan called the “nickel package,” which was approved by the Washington State Legislature in 2003. In 2005, the legislature passed a second funding package, TPA. It also provided funding for the Renton Nickel Improvement Project. Construction of the Renton Nickel Improvement Project began in 2007 and would be completed by 2011.

The other I-405 projects that relate to the Tukwila to Renton Project address the sections north of SR 169 to the end of I-405 at I-5 in Lynnwood. Of these projects, the first stage for the Kirkland area of I-405 has been completed. The first stage for Bellevue, SE 112th Street to SE 8th Street, began construction in 2007. As each successive project becomes operational, the public would benefit from the improved traffic movement, safety, and capacity along the I-405 corridor.

Another related project is the HOT Lanes Pilot Project on SR 167. This project would convert the existing HOV lanes to High-Occupancy Toll (HOT) lanes between Auburn and Renton. HOT lanes would better manage the SR 167 corridor traffic demand through tolling. The Tukwila to Renton Project would tie into the HOT lanes project.

In addition, some local agencies are working on projects that would tie into the work on I-405. For example, the City of

Renton is proposing to reconstruct Rainier Avenue S, in particular, improving local access and circulation to the interchange with I-405 and SR 167.

As well as the road projects discussed above, WSDOT and the City of Renton are constructing the Springbrook Creek Wetland and Habitat Mitigation Bank. This project would create a large wetland complex that would provide mitigation credits to multiple projects including the Tukwila to Renton Project.

What is the No Build Alternative?

The No Build Alternative and baseline condition assumes that the improvements associated with the Renton Nickel Improvement Project are constructed. Only routine activities such as road maintenance, repair, and safety improvements would be expected to take place between 2014 and 2030. This alternative does not include improvements that would increase roadway capacity or reduce congestion beyond baseline conditions. For these reasons, it does not satisfy the project's purpose to reduce congestion on I-405 between I-5 in Tukwila and SR 169 in Renton.

The No Build Alternative has been evaluated in this discipline report as a comparison for the effects associated with the Build Alternative.

SECTION 3 STUDIES AND COORDINATION

What is the study area and how was it determined?

The *I-405 Corridor Program Final Preliminary Section 4(f) Evaluation*³ identified potentially affected public parks, recreation areas, wildlife and waterfowl refuges, and historic resources (collectively referred to as Section 4(f) resources) within the limits of the I-405 corridor extending from I-5 in Tukwila north to I-5 in Lynnwood. For the Tukwila to Renton Project, the Section 4(f) evaluation was conducted at a more detailed project level that assessed Section 4(f) lands located within a quarter-mile of the proposed I-405 improvements between approximately I-5 and SR 169. The precedent for studying 0.25 mile on each side of the freeway permits the identification of potential adverse effects resulting from the proposed project and was generally agreed upon in the *I-405 Corridor Program Final Preliminary Section 4(f) Evaluation*.

How did we collect information on the Section 4(f) resources?

Additional research beyond the preliminary evaluation findings was completed and included site investigations at each potential Section 4(f) resource and coordination with the cities of Tukwila and Renton; King County; the Recreation and Conservation Office (RCO), formerly known as the Interagency Committee for Outdoor Recreation (IAC); and the National Park Service (NPS). The coordination included but was not limited to confirmation of ownership, how and when the resource was acquired, historical and projected usage, and the managing agency's current and future plans.

The team evaluating cultural resources surveyed all historic resources in the project area that predate 1965. The year 1965 was selected to cover all cultural resources that would be 50 or more years old by the time some parts of the project are built. Please refer to the *Cultural, Historic, and Archaeological Technical Memorandum* for more detailed information on cultural resources.

³ *Washington State Department of Transportation, I-405 Corridor Program NEPA/SEPA Final Environmental Impact Statement, 2002.*

How did we evaluate effects on the Section 4(f) resources?

We evaluate effects on Section 4(f) resources based on guidance contained within the FHWA Section 4(f) Policy Paper issued March 1, 2005; Title 23 of the Code of Federal Regulations, Section 771.135 (Section 4(f)); and the WSDOT Environmental Procedures Manual published in March 2006. These documents explain how Section 4(f) applies generally and to specific situations. They are based on court decisions, experience, and on policies developed by FHWA and United States Department of Transportation (USDOT). The policy paper serves as a guide for how Section 4(f) applies to common project situations often encountered by state departments of transportation. The manual clarifies the required coordination and documentation procedures.

With which agencies and persons did we coordinate concerning avoidance alternatives, effects, and measures to minimize harm?

Section 4(f) requires consultation with the Department of the Interior and, as appropriate, the involved offices of the Departments of Agriculture (USDA) and Housing and Urban Development (HUD) in developing transportation projects and programs which use lands protected by Section 4(f).

Consultation with the USDA would occur whenever a project uses Section 4(f) land from the National Forest System. Consultation with the HUD would occur whenever a project uses Section 4(f) land for/on which certain HUD funding had been utilized. Since neither of these conditions applies to the proposed project, consultation with USDA and HUD is not required.

An evaluation of potential historic properties was prepared by WSDOT as part of the *Cultural, Historic and Archaeological Technical Memorandum* for this project. This evaluation concluded that two historic properties identified in the corridor, the James Nelsen House and the Renton History Museum, were eligible for listing on the National Register of Historic Places. The State Historic Preservation Officer (SHPO) reviewed this documentation and concurred with this determination.

WSDOT initiated coordination meetings with the RCO and the NPS to discuss land use issues related to Section 6(f) and RCFB within the Christensen Greenbelt.

WSDOT consulted with the City of Tukwila as the agency with jurisdiction over the Duwamish-Green River Trail/Christensen Greenbelt, Duwamish-Green River Trail Trailhead, and the Interurban Trail to obtain agreement on proposed construction activities that would temporarily affect these three Section 4(f) resources.

WSDOT initiated extensive coordination with the City of Renton to evaluate and plan the future design for Cedar River Park, Cedar River Trail, Liberty Park, and the Narco property. An agreement between WSDOT and the City of Renton identifies key decisions concerning avoidance and minimization of effects, proposed mitigation for Tukwila to Renton Project effects, and City-proposed master plan improvements for park and recreation development at each Section 4(f) resource.

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SECTION 4 BASELINE CONDITIONS

The baseline condition for the Tukwila to Renton Project assumes completion of the Renton Nickel Improvement Project. The Renton Nickel Improvement Project built an additional lane both northbound and southbound between I-5 and SR 169. On SR 167, the project extended the southbound high-occupancy vehicle (HOV) lane north to I-405 and added a southbound auxiliary lane from I-405 to the SW 41st Street off-ramp. None of the existing conditions in the Section 4(f)-protected properties were affected by the Renton Nickel Improvement Project. Therefore, the existing conditions and the baseline conditions are the same for each of the Section 4(f) properties.

What Section 4(f) resources might be affected?

There are 23 publicly-owned parks and recreation areas, two historic resources, and no waterfowl or wildlife refuges near the proposed Tukwila to Renton Project. Exhibit 4-1 lists these resources from west to east (northbound), compares each resource with Section 4(f) criteria, and identifies those resources that would be protected Section 4(f) properties. Of these, 19 parks and two historic properties are protected Section 4(f) resources. These properties and the study area are shown in Exhibits 4-2 and 4-3.

Exhibit 4-1: Park, Trail, Recreation Areas, and Historic Properties Compared Against Section 4(f) Criteria

Property / Jurisdiction	Publicly Owned	Open to the Public	Major Purpose is Recreation	Significant as a Park	Section 4(f) Protected Property
Park and Recreation Areas					
Crystal Springs Park (<i>Tukwila</i>)	Yes	Yes	Yes	Yes	Yes
Ikawa Park (<i>Tukwila</i>)	Yes	Yes	Yes	Yes	Yes
Tukwila Park (<i>Tukwila</i>)	Yes	Yes	Yes	Yes	Yes
Duwamish-Green River Trail/ Christensen Greenbelt (<i>Tukwila</i>)	Yes	Yes	Yes	Yes	Yes
Duwamish-Green River Trail Trailhead (<i>Tukwila</i>)	Yes	Yes	Yes	Yes	Yes
Fort Dent Park (<i>Tukwila</i>)	Yes	Yes	Yes	Yes	Yes
Interurban Trail (<i>Tukwila</i>)	Yes	Yes	Yes	Yes	Yes
Springbrook Trail (<i>Renton</i>)	Yes	Yes	Yes	Yes	Yes
Lake Street Open Space (<i>Renton</i>) ¹	Yes	No	No	No	No
Panther Creek Wetlands Open Space (<i>Renton</i>) ¹	Yes	No	No	No	No
Gateway Park (<i>Renton</i>)	Yes	Yes	Yes	Yes	Yes
Piazza Park (<i>Renton</i>)	Yes	Yes	Yes	Yes	Yes
Burnett Linear Park (<i>Renton</i>)	Yes	Yes	Yes	Yes	Yes
Cedar River Trail-South Loop (<i>Renton</i>)	Yes	Yes	Yes	Yes	Yes
Tonkins Park (<i>Renton</i>)	Yes	Yes	Yes	Yes	Yes
Renton Hill Park (<i>Renton</i>) ^{2,3}	Yes	Yes	Yes	No	No
Veterans Memorial Park (<i>Renton</i>)	Yes	Yes	Yes	Yes	Yes
Jones Park (<i>Renton</i>)	Yes	Yes	Yes	Yes	Yes
Cedar River Natural Area (<i>Renton</i>) ¹	Yes	Yes	No	No	No
Narco Property (<i>Renton</i>) ⁴	Yes	Yes	Yes	Yes	Yes
Cedar River Trail (<i>Renton</i>)	Yes	Yes	Yes	Yes	Yes
Cedar River Park (<i>Renton</i>)	Yes	Yes	Yes	Yes	Yes
Liberty Park (<i>Renton</i>)	Yes	Yes	Yes	Yes	Yes

¹The City of Renton Parks Department and the City of Renton *2003 Park, Recreation, and Open Space Implementation Plan* show these are currently undeveloped and only receive incidental or occasional recreation, therefore they are not significant under Section 4(f).

²Consultation with the City of Renton Parks Department, the agency with jurisdiction for Renton Hill Park, concluded that this park is not identified in the City of Renton *2003 Park, Recreation, and Open Space Implementation Plan* and is not considered significant within the recreational and park objectives of the City.

³Renton Hill Park is also known as Freeway Park.

⁴While the Narco Property has not been developed, the City of Renton has completed long-range master planning that integrates the property and future recreation facilities with Cedar River Park, Liberty Park, and the Cedar River Trail.

Exhibit 4-1: continued

Historic Properties			
Property / Jurisdiction	Listed on National Register of Historic Places (NRHP)	NRHP Status	Section 4(f) Protected Property
James Nelsen House (Private Trust) ⁴	No	Eligible	Yes
Renton History Museum (Renton) ⁴	No	Eligible	Yes

⁴ Listed on the Washington Heritage Register.

Exhibit 4-2: Potential Section 4(f) Resources Identified in the Study Area

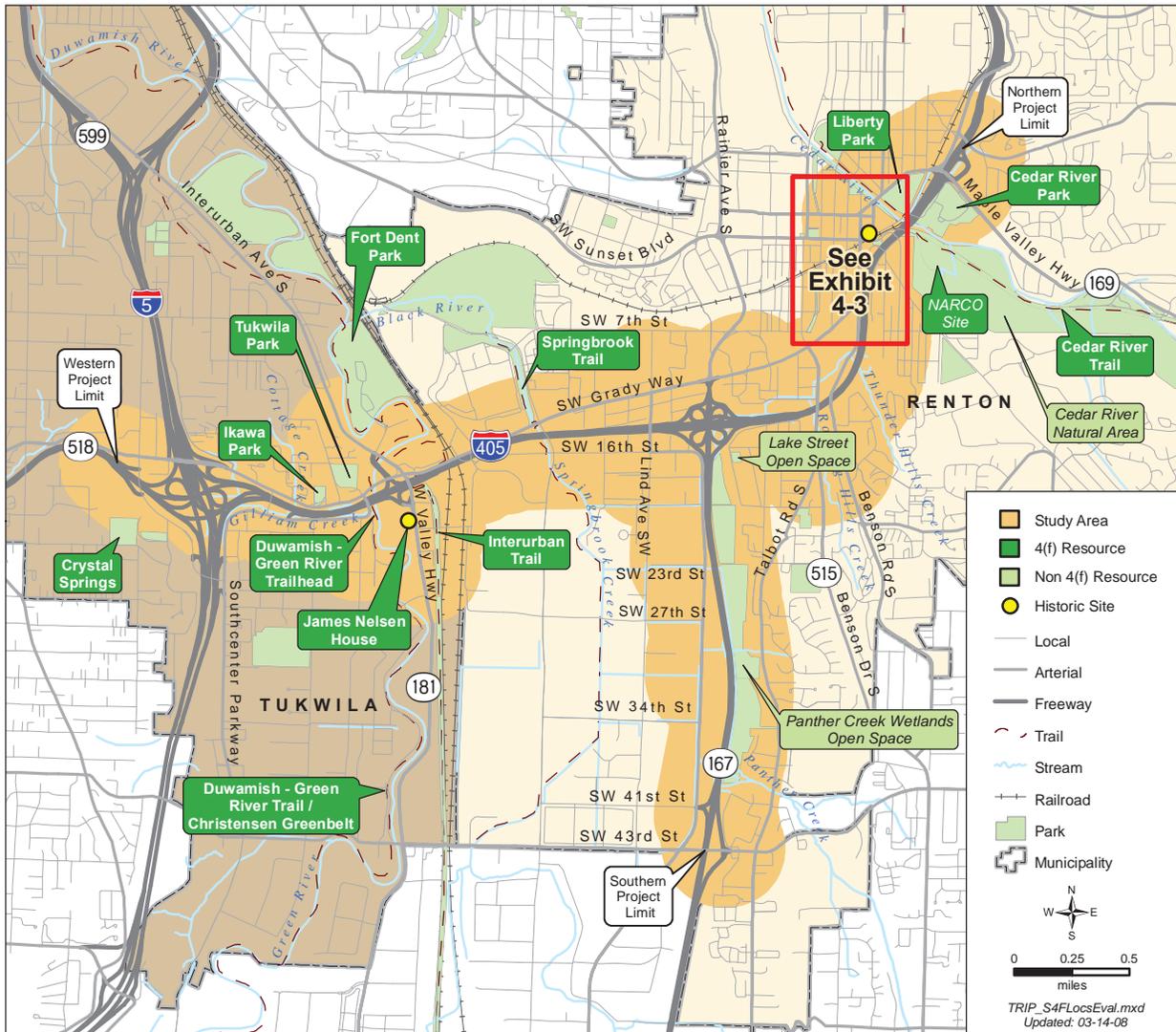


Exhibit 4-3: Inset, Potential Section 4(f) Resources Identified in the Study Area



What Section 4(f) resources may be subject to use by any alternative WSDOT is considering?

This section describes the Section 4(f)-protected properties along the Tukwila to Renton Project, beginning at the western project limit and continuing east (northbound).

Crystal Springs Park

Crystal Springs Park is an 11-acre park located on a hillside with views of the Cascade Range to the east and the City of Seattle to the north (Exhibit 4-4). This site contains two separate areas which are divided by a steep hillside. The



Recreation facilities at Crystal Springs Park

upper portion contains an open grass area, walking path, covered picnic area and natural area. The lower portion contains a picnic shelter, restroom, horseshoe pits, two playgrounds, a lighted tennis court and a lighted basketball court. A spring, which supplied water to valley residents years ago, still flows in the park today. This park is located southwest of the I-405/I-5 interchange.

Exhibit 4-4: Crystal Springs Park



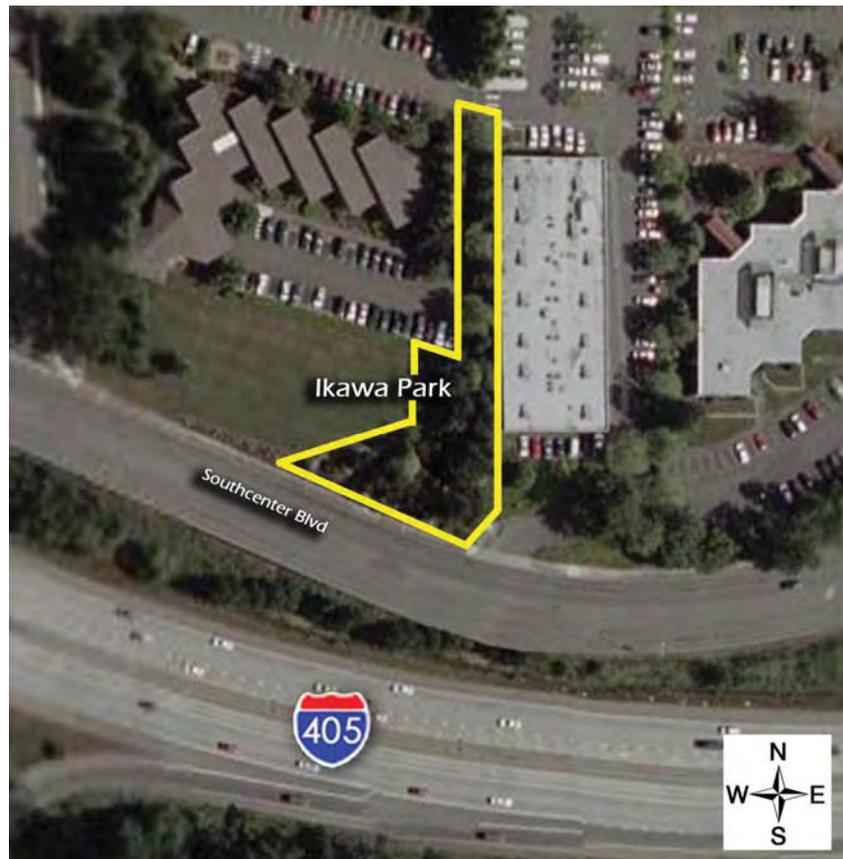
Ikawa Park

Ikawa Park (Exhibit 4-5) was dedicated in November 1987 in recognition of the friendship bond between the cities of Tukwila and Ikawa, Japan. Recreation use is passive. The park comprises a Japanese garden, koi pond and waterfall, and trail with benches. It is situated on 0.2 acres adjacent to Tukwila City Hall and approximately 200 feet north of the I-405 right-of-way. There are about 3,000 visits to the park annually.



Japanese Garden at Ikawa Park

Exhibit 4-5: Ikawa Park



Picnic shelter in Tukwila Park



Children's play area in Tukwila Park

Tukwila Park

This 6.5-acre neighborhood park was built in 1934 and is the oldest of the Tukwila parks. The site is covered with mature vegetation, which includes large firs and a variety of rhododendrons. Facilities at the site include a gazebo, a wooded area, a picnic area, a basketball court, a lighted tennis court, a paved pathway and children's playground. The southern property line of Tukwila Park roughly parallels I-405 and lies approximately 360 feet north of the right-of-way. See Exhibit 4-6.

Exhibit 4-6: Tukwila Park



Duwamish-Green River Trail near SR 181



Duwamish-Green River Trail looking north toward I-405

Duwamish-Green River Trail/Christensen Greenbelt

The Duwamish-Green River Trail connects with a King County trail to the north and existing Tukwila and Kent trails to the south. The City of Tukwila developed 8.4 miles of 12-foot-wide paved trail with soft shoulders for jogging. Landscaping, wildlife habitat enhancement, picnic tables and benches enhance the recreation experience along the trail. The trail alignment is shown on Exhibit 4-10.

The Washington Wildlife Recreation Program (WWRP) and the Land and Water Conservation Fund Act (LWCFA) are administered through the RCO. RCO awarded grants from both of these programs to the City of Tukwila to acquire land and develop the Duwamish-Green River Trail/Christensen Greenbelt through Tukwila. According to the terms of the grants, any conversion of real property acquired or facilities developed or restored to a different use than the original purpose of the grant must be approved by the RCO and the NPS.⁴ In addition, WSDOT will prepare Section 6(f)

What is the Land and Water Conservation Fund Act?

Passed by Congress in 1965, the Land and Water Conservation Fund Act (LWCFA) provides grants which pay up to half the acquisition and development cost of outdoor recreation sites and facilities. Section 6(f) of the LWCFA addresses transportation projects and prohibits the conversion of property acquired or developed with these grants to a non-recreational purpose without the approval of the Department of the Interior's National Park Service.

⁴ *The National Park Service will be requested to approve the conversion of real property because a LWCF grant was awarded to the City of Tukwila for use on the Duwamish-Green River Trail/Christensen Greenbelt.*

“Temporary Non-Conforming Use” documentation on behalf of the City of Tukwila to address the construction-related trail closure.

Duwamish-Green River Trail Trailhead

One of the trailheads for the Duwamish-Green River Trail was developed on city-owned property and is located immediately south of I-405 and east of Christensen Road. See Exhibit 4-7. The parcel is approximately 0.8 acres and contains 24 parking spaces, picnic tables, landscaping, and trail and river access. Exhibit 4-7 illustrates the approximate boundary of the trailhead and also depicts how the Duwamish-Green River Trail crosses through the trailhead property.



Duwamish-Green River Trail Trailhead

Exhibit 4-7: Duwamish-Green River Trail Trailhead



Fort Dent Park

Fort Dent Park is the largest park in Tukwila. This 54-acre former King County Park was acquired in January 2003 and has a baseball complex with four lighted fields, soccer fields, playground, picnic area, restrooms, trails and open areas. Starfire Sports operates a concession within Fort Dent Park. In 2004, Starfire Sports constructed an all-weather soccer complex that features the largest FieldTurf™ soccer installation in the United States. This complex offers elevated viewing points to watch multiple games, accommodates numerous tournaments, and provides facilities for a variety of attendant activities. See Exhibit 4-8.



Fields at Fort Dent Park

Exhibit 4-8: Fort Dent Park



Interurban Trail crossing beneath SW Grady Way

Interurban Trail

The Interurban Trail extends 14 miles from just north of I-405 in Tukwila to 3rd Avenue SW, south of the city of Pacific. It is a paved regional walking and biking trail. This trail is used extensively by bicyclists, both for recreation and commuting. The trail alignment is shown on Exhibit 4-10.



Interurban Trail looking west and located between I-405 and SW Grady Way

James Nelsen House



James Nelsen House

The James Nelsen House, owned and maintained by the Nelsen Family Residence Historical Trust, is a 2 1/2 story, late Victorian farmhouse that was built in 1905 on a 200-acre dairy farm. Today, the James Nelsen House site is approximately 2.2 acres. See Exhibit 4-9. The house was subsequently moved 60 feet west of its original location in 1964 and placed atop a new concrete foundation. The house measures 32 feet by 40 feet and has a central hipped roof with three, dropped gable bays and horizontal wood drop siding. Most of the windows consist of double-hung, one over one sashes with plain wood surrounds and entablature lintels. An entablature is a major element derived from classical architecture and in this case represents the ornamental, horizontal element or lintel above the windows shown in the photograph.

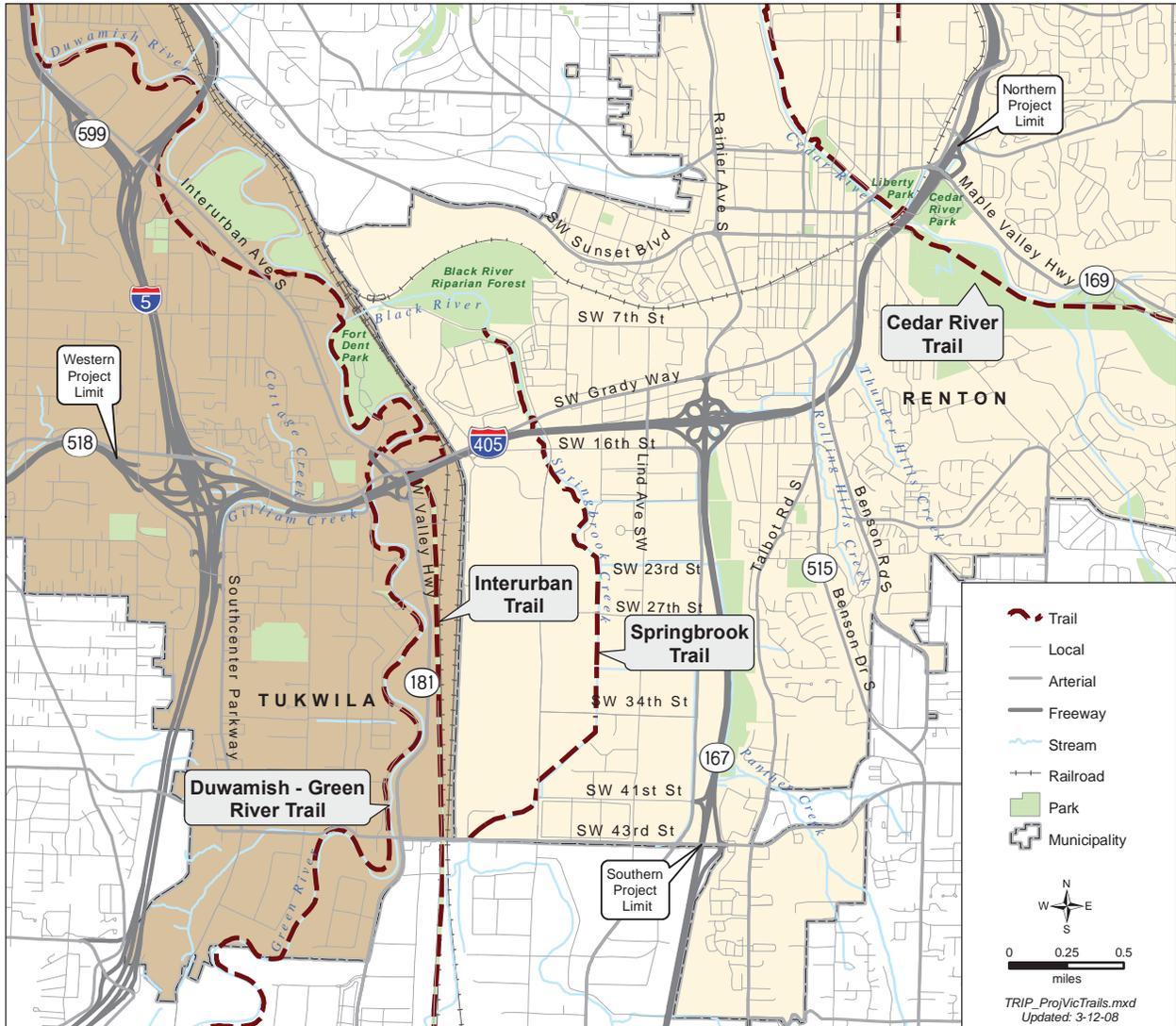
Exhibit 4-9: James Nelsen House



An open porch with hip roof supported by turned columns provides access to the main entrance in the house's northeast corner. The James Nelsen House is currently listed on the Washington Heritage Register and is recommended for listing on the NRHP (Source: Garfield, L. 1990. The James Nelsen House (45KI596), NRHP Registration Form is on file at the Washington State Department of Archaeology and Historic

Preservation). This listing is recommended under Criterion B and Criterion C as defined by the National Register of Historic Places. These criteria embody distinctive characteristics of a style, type, period, or method of construction or are a valuable example of the use of indigenous materials or craftsmanship.

Exhibit 4-10: Duwamish-Green River, Interurban, and Springbrook Trails



Springbrook Trail

The Springbrook Trail is a paved, mixed-use trail traversing north-south through Renton in the Green River Valley. It follows the course of Springbrook Creek and north of I-405 it passes through a wetland rich in bird life and distinctive



Springbrook Trail

vegetation. Some of the trail is undeveloped. The developed portion of the trail is approximately 3 miles. The trail edge is landscaped and lined with mowed grass. The trail alignment is shown on Exhibit 4-10.

Gateway Park and Piazza Park

The Gateway and Piazza Parks are situated on less than an acre of property on Third Avenue. These two parks are bisected by Logan Avenue. See Exhibit 4-11. These parks are major focal points for downtown residents and provide space for community-wide special events and activities. They feature a combination of paved surfaces, landscaping, benches, boulders, and raised seat walls. Two water features—a shallow “rushing river” and a fountain—evoke memories of the Cedar and Black Rivers that once flowed here. These City of Renton parks were constructed in 2000.

Exhibit 4-11: Gateway Park and Piazza Park



Gateway Park



Piazza Plaza

Burnett Linear Park

This small one-acre park site is sandwiched between the northbound and southbound lanes of Burnett Avenue S. See Exhibit 4-12. It spans approximately three blocks and features a new (2006) children's play area, landscaping, and picnic tables. A ten-foot-wide pedestrian trail meanders through the park.

Exhibit 4-12: Burnett Linear Park



Burnett Linear Park



Children's play area and trail in Burnett Linear Park

Cedar River Trail-South Loop



Segment of Cedar River Trail-South Loop with picnic table

The south loop of the Cedar River Trail runs parallel to and along the west side of the Cedar River. The City of Renton is developing this trail as an extension of the primary Cedar River Trail. Eventually, this loop will connect to the Burnett Linear Trail and continue to points south. The alignment, after it leaves the river, generally follows an abandoned rail line that preceded the construction of Burnett Avenue. See Exhibit 4-13. According to the City, a WWRP grant administered by RCO was used to construct a portion of the South Loop. The City also received a LWCF grant for constructing a portion of the trail along Burnett Place S. This portion of the trail, which is more than 0.25 mile from I-405, would be subject to the Section 6(f) conversion process and would require Section 6(f) Temporary Non-Conforming Use documentation in the event there would be direct or temporary uses or the trail would be closed for construction-related activities. The trail is paved and varies in width from 4 to 6 feet. The trail edges are landscaped with shrubs, trees, and lawns. Benches and picnic tables are located along the trail.

Exhibit 4-13: Cedar River Trail – South Loop

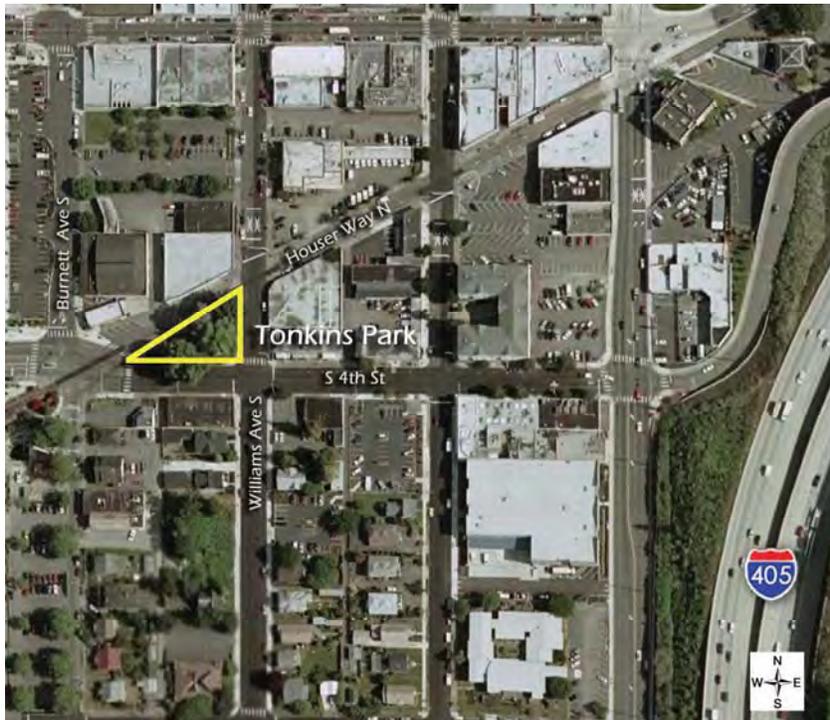


Tonkins Park

Tonkins Park, situated on a triangular shaped site, is bounded by Houser Way N, Williams Avenue S, and S 4th Street. See Exhibit 4-14. It is roughly 0.3 acres and contains a small amphitheater, picnic tables, and a commemorative life-sized statue of a donkey that ran away from the mines. Large deciduous trees line all sides of the park.



Exhibit 4-14: Tonkins Park



Tonkins Park

Veterans Memorial Park



Veterans Memorial Park

In April 1998, the Renton City Council made the recommendation to locate the Veterans Memorial Park at the corner of S 3rd and Main Avenue S in Renton. See Exhibit 4-15. The property was dedicated as a memorial to the veterans who honorably served their country. The park was constructed in 2000 and features five granite walls in the shape of a star, a bronze statue centered in the star, benches, flags, and landscaping. Tiles engraved with the names of servicemen line the walls. The site is approximately 0.5 acres.

Exhibit 4-15: Veterans Memorial Park and Renton History Museum



Renton History Museum



Renton History Museum

The 6,000 square foot Renton History Museum is housed in an Art Deco-style, former Renton Fire Station at Mill Avenue S and Houser Way N. See Exhibit 4-15. This structure is two stories and was constructed of poured concrete between 1939 and 1942. It measures 50 feet by 40 feet with a 40-foot-tall square hose tower in the northwest corner and flanking wings which measure 60 feet by 20 feet. Some modifications have been made to the structure including the replacement of the original steel clad wood doors with roll up doors in 1944. The structure is currently listed on the Washington Heritage

Register and has been recommended for listing on the NRHP (Source: Wissel, Jayne and William Collins. 1978. Renton Fire Station (45KI209), the NRHP form is on file at the Washington Department of Archaeology and Historic Preservation).

Jones Park

Jones Park is a 1.2-acre neighborhood park overlooking the Cedar River and the South Loop of the Cedar River Trail. Located at Wells Avenue S at the Cedar River, this park has mature landscaping, benches, picnic tables, restrooms, and a children's play area. The park also provides recreation opportunities for nearby residents. See Exhibit 4-16.



Jones Park

Exhibit 4-16: Jones Park



Cedar River Trail

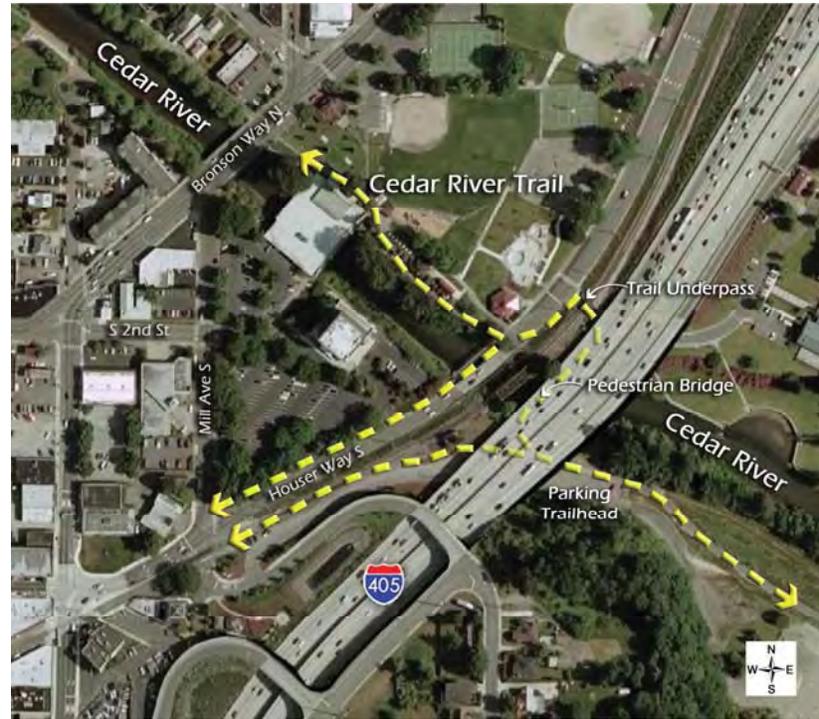
The Cedar River Trail system, one of Renton's major recreation facilities, extends five miles from Lake Washington east to the city's boundary, and then continues south and east as part of King County's regional trail system. The paved trail follows an old railroad right-of-way from downtown Renton to King County's Landsburg Park. The Cedar River Trail serves as a physical link to a series of parks along the Cedar River corridor, beginning at Cedar River Trail Park on Lake Washington and including Jones Park, Liberty Park, Cedar



Trailhead for Cedar River Trail

River Park, Maplewood Park, Cedar Grove Natural Area, and Landsburg Park. Cedar River Trail in the vicinity of I-405 is depicted on Exhibit 4-17. The City of Renton received two WWRP grants from RCO for the acquisition and development of the trail. If the use of the trail and/or real property associated with the trail changes, the conversion must be approved by RCO.

Exhibit 4-17: Cedar River Trail



Carco Theater



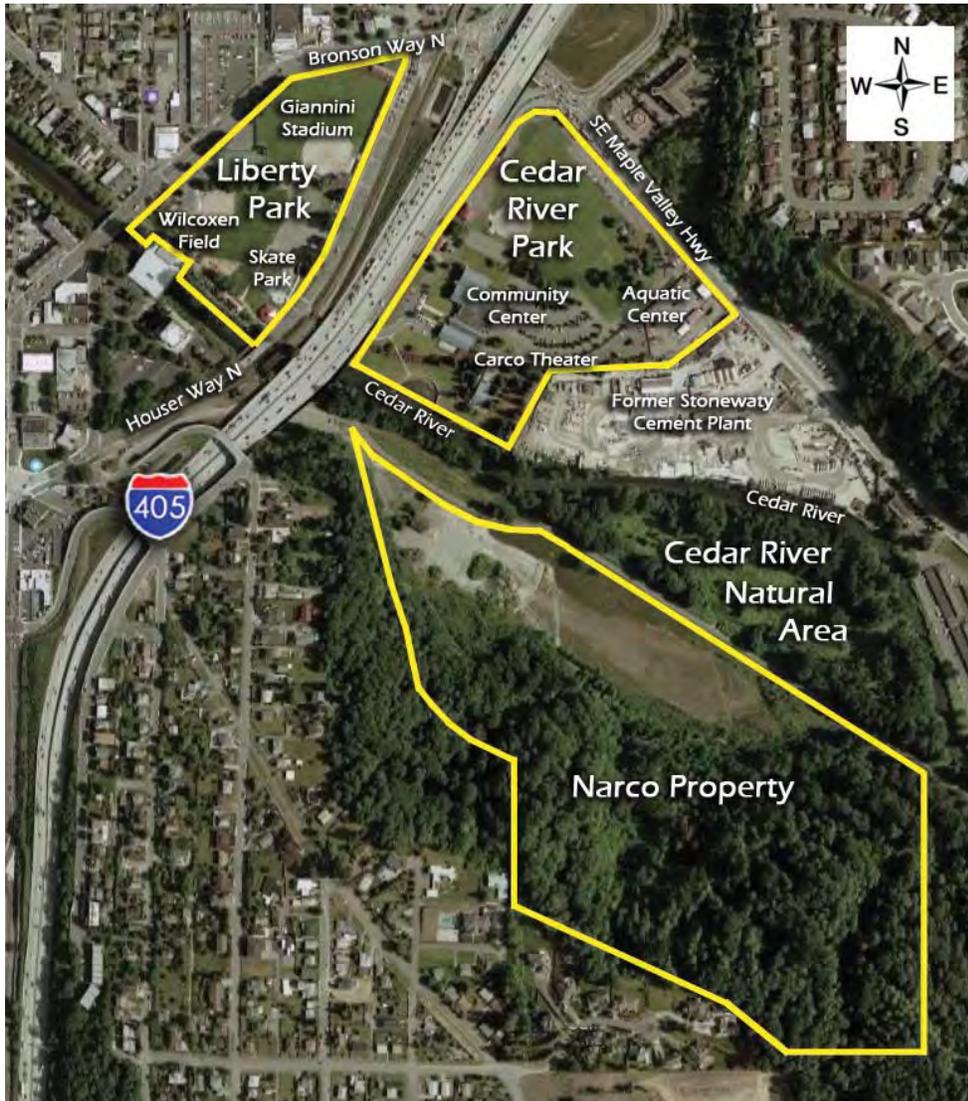
Renton Community Center

Cedar River Park

Cedar River Park is a 23-acre City of Renton community park situated between I-405 to the west; SR 169 (Maple Valley Highway) to the north; the former Stoneway Cement Plant to the east; and the Cedar River, Cedar River Regional Trail, and the Narco Community Park property to the south. See Exhibit 4-18. Within the park are:

- Carco Theater, a municipally-owned and operated indoor center for the performing arts.
- Renton Community Center that includes a fitness room, gymnasium, and classrooms.

Exhibit 4-18: Cedar River Park, Narco Property, Liberty Park



- Henry Moses Aquatic Center, an outdoor facility that features lap and leisure pools, a water slide, sun and shade patios, a bathhouse, and a concession area.
- Multi-use fields that include soccer and football fields and a baseball/softball complex.
- Approximately 750 feet of shoreline with a sandy beach and a grassy sunbathing area along the Cedar River that is used for fishing, canoeing, kayaking, and swimming.



Henry Moses Aquatic Center

How do passive and active recreation differ?

- Passive recreational activities include such things as walking, nature watching, picnicking, and other less intensive recreational activities.
- Active recreational activities include swimming, baseball, tennis, basketball, soccer, and football.



Narco Property with the Cedar River Trail



Giannini Stadium



Skate Park

Narco Property

The master plan for the 15-acre Narco park site proposes to develop an active recreation facility with soccer fields, restroom/shelter building, trails, and parking for 100 to 150 vehicles. An existing pedestrian bridge, which accommodates the Cedar River Interpretive Trail, links the site to Renton's Cedar River Park. A trailhead and parking currently exist for the Cedar River Trail. The City of Renton has placed a high priority on developing this park. See Exhibit 4-18.

Liberty Park

Liberty Park is Renton's oldest park facility. The 12-acre park site was purchased from the Sartori family in July 1914 and was first known as "City Park." The name was later changed to Liberty Park to commemorate World War I veterans. Liberty Park continues to be the City's major park and playfield area. See Exhibit 4-18. It also serves as the venue for the annual Fourth of July celebration and the Renton River Days. Specific park elements include:

- Giannini Stadium, a baseball and softball complex, includes a 930-seat grandstand, restrooms, a concession area, and locker rooms.
- Wilcoxon Field and bleachers for baseball and softball. Both it and Giannini Stadium support league games and tournaments.
- The 8,400 square foot Skate Park with obstacles for in-line skaters and skateboarders. The Skate Park has unique "skateable" artwork, funded by Renton Municipal Arts Commission. The artwork, called "Rolling Waters," comprises a series of hump-like ramps of colored concrete that mimic the motion of water.

The park also includes a lighted multi-purpose court, lighted tennis courts, children's play equipment, restroom facilities, parking, and access to the Cedar River Trail.

Liberty Park has approximately 600 feet of riverfront shoreline. A garden trail along the river winds through many varieties of rhododendrons.

Landscaping is an important element in Liberty Park. In addition to the rhododendron garden, mature oaks line the park adjacent to Bronson Way. Along Houser Way, a large elm is at the entrance to Giannini Stadium. Ornamental shrubs and trees, hedges, and manicured lawns occur throughout the park.

SECTION 5 PROJECT EFFECTS

How would the project use Section 4(f) resources?

This section addresses the extent to which the Build Alternative would affect the protected Section 4(f) properties within the study area for the Tukwila to Renton Project. In Section 1, the terms direct use, temporary occupancy, and constructive use are described. Direct use, temporary occupancy, and constructive use were examined for each Section 4(f) resource and are described beginning at the western project limit and continuing east (northbound).

Direct Use and Temporary Occupancy

During development of the project, WSDOT strove to find reasonable options that avoid effects to the community and the environment while improving driving conditions for motorists on I-405. The development of a viable project necessitated finding an optimal balance between meeting the project purpose and need and minimizing project effects. FHWA and WSDOT also considered avoidance alternatives to eliminate effects to Section 4(f) resources. These are discussed in Section 6. As a result, the Tukwila to Renton Project would have a use at the following five resources:

- Duwamish-Green River Trail Trailhead
- Cedar River Park
- Liberty Park
- Cedar River Trail
- Narco Property

Constructive Use

Constructive use is a type of indirect use in which a transportation project's proximity impacts (as opposed to direct impacts) is so severe that the protected activities, features, or attributes that qualify a resource for protection under Section 4(f) is substantially impaired. Examples include excessive noise level increases, diminished aesthetic features, ecological intrusions, and other indirect impacts to the resource's environment or utility. Noise, visual quality, and air quality studies were completed for the Tukwila to Renton Project EA. Information from these studies was analyzed to determine whether there would be constructive uses at any of the Section 4(f) resources.

Air Quality Analysis

Under the Clean Air Act Amendments of 1990, USDOT cannot fund, authorize, or approve projects that are not first found to conform to Clean Air Act requirements. The Tukwila to Renton Project must be in compliance with National Ambient Air Quality Standards (NAAQS). Currently, the I-405 Corridor meets all NAAQS, and based on the results of modeling, FHWA and WSDOT concluded that the Tukwila to Renton Project would not substantially affect air quality in the vicinity of the Section 4(f) resources.

What is dBA?

Sound is created when objects vibrate. The human response to sound depends on the magnitude of a sound and the sound's frequency or pitch. The decibel (dB) is used to measure sound level and is a logarithmic unit. Noise specialists use weighting factors to measure how humans perceive sounds of low to moderate magnitude. A-weighting (dBA) is used to model noise levels along the I-405 corridor.

What are FHWA noise abatement criteria?

The FHWA noise abatement criteria are based on documented and measured speech interference. Noise can also disturb wildlife by disrupting communication, interfering with mating, and reducing the ability to obtain sufficient food, water, and cover. A location is determined to have traffic noise effects if the traffic noise level is predicted to approach within 1 dBA of, meet, or exceed the NAC in the future design year.

Noise Analysis

Project noise specialists modeled noise levels for both the Build and No Build Alternative. The year 2030 was used to determine projected dBA levels. These dBA levels were compared with FHWA criteria to identify acceptable noise levels for different land uses. The FHWA noise abatement criterion (NAC) for recreation resources is 67 dBA. Noise levels range from representative suburban outdoor sound levels, between 50 and 60 dBA, to very noisy levels (above 70 dBA) that are typical of locations within 100 feet of a busy freeway.

In all cases, the modeled noise levels⁵ approach or exceed the NAC at the Section 4(f) resources where data was available. These levels increased or decreased by 1 to 2 dBA except at Cedar River Park where the increase in noise level between the baseline condition and the 2030 build condition was projected to be 3 dBA. The threshold at which the human ear can perceive a change in sound levels is 3 dBA. One facility in Cedar River Park is the indoor Carco performing arts theater. Because all performances are indoors, additional noise analysis was not conducted specifically to address noise intrusion at the theater. WSDOT determined that the Section 4(f) resources are physically located where noise mitigation from I-405 would not be feasible. Furthermore, the absence of a large number of noise-sensitive receptors in the immediate area of each Section 4(f) resource prevents it from meeting WSDOT's reasonableness criteria for constructing noise barriers.

FHWA and WSDOT concluded that the projected noise levels and vibration during operations attributable to the Tukwila to

⁵ *Modeling of noise levels occurred during Spring 2006. I-405, Tukwila to Renton Improvement Project (I-5 to SR 169-Phase 2) Noise Discipline Report.*

Renton Project would not substantially interfere with the use and enjoyment of the Section 4(f) resources.

Visual Quality Analysis

Both FHWA and WSDOT mandate evaluations of visual effects, including aesthetics and light and glare. This assessment considers views from and toward the freeway and the evaluation is based on a qualitative visual quality rating system.⁶ One result of the evaluation identifies whether the proposed project substantially diminishes aesthetic features or attributes that qualify a resource for protection under Section 4(f). FHWA and WSDOT determined that the Tukwila to Renton Project would not substantially diminish aesthetic features or attributes protected by Section 4(f) at any of the identified resources.

What would be the effects on each Section 4(f) Resource?

Crystal Springs Park

WSDOT proposes to construct stormwater features west of the I-405/I-5 interchange and north of SR 518. These proposed stormwater features would be separated from Crystal Springs Park by SR 518 and approximately 400 feet of private property.

None of the proposed construction activities would occur in or adjacent to Crystal Springs Park. No land would be acquired, either permanently or temporarily, from this park.

Ikawa Park

During the construction of the Tukwila to Renton Project, Southcenter Boulevard would be widened and the road profile would be raised by up to four feet approximately 1,000 feet east of Ikawa Park. No construction would occur in the I-405 corridor or on Southcenter Boulevard immediately adjacent to the park.

No land would be acquired, either permanently or temporarily, from this park.

What is the test for feasibility and reasonableness to mitigate noise?

WSDOT evaluates noise sensitive areas that approach or exceed the NAC to determine the feasibility and reasonableness to mitigate noise with noise barriers. To be feasible, a barrier must be constructible in a location that achieves a noise reduction of at least 7 dBA. Determination of reasonableness depends on the number of sensitive receptors benefiting by a reduction in noise of at least 3 dBA, the cost effectiveness of the barriers, and concerns such as aesthetics, safety, and desires of nearby residents. A sensitive receptor represents a location where noise levels (dBA) approach or exceed the NAC or where noise levels increase 10 dBA or more over existing conditions.

⁶ I-405, Tukwila to Renton Improvement Project (I-5 to SR 169 – Phase 2) Visual Quality Technical Memorandum, David Evans and Associates. 2007.

Tukwila Park

Many construction activities associated with the Tukwila to Renton Project would occur in the vicinity of Tukwila Park:

- Southcenter Boulevard would be widened and raised.
- The existing 66th Avenue S (Christensen Road) bridge would be demolished.
- A new 66th Avenue S bridge would be constructed immediately west of the existing location.
- In the I-405 corridor, two new bridges (northbound and southbound) would replace the existing I-405 bridges crossing the Green River.
- SR 181 (Interurban Avenue S) would be widened to add capacity in the area around the interchange.

None of these construction activities would occur in or immediately adjacent to Tukwila Park. No land would be acquired, either permanently or temporarily, from this park.

Duwamish-Green River Trail/Christensen Greenbelt

Construction proposed by the Build Alternative in the vicinity of the Duwamish-Green River Trail/Christensen Greenbelt would include:

- Reconstructing the south half of the SR 181 interchange. This would include removing the existing Tukwila Parkway northbound on-ramp, extending Tukwila Parkway east to SR 181 over the Green River and Duwamish-Green River Trail, and constructing a new on-ramp from Tukwila Parkway to northbound I-405.
- Reconstructing the northbound and southbound I-405 bridges over the Green River and the Duwamish-Green River Trail.
- Widening the Southcenter Boulevard bridge over the Green River and the Duwamish-Green River Trail.
- Demolishing the existing 66th Avenue S (Christensen Road) bridge.
- Constructing a new 66th Avenue S bridge constructed immediately west of the existing location.
- Maintaining the existing alignment of the Duwamish-Green River Trail, but lowering the trail elevation to allow for adequate vertical clearance beneath the new bridge.

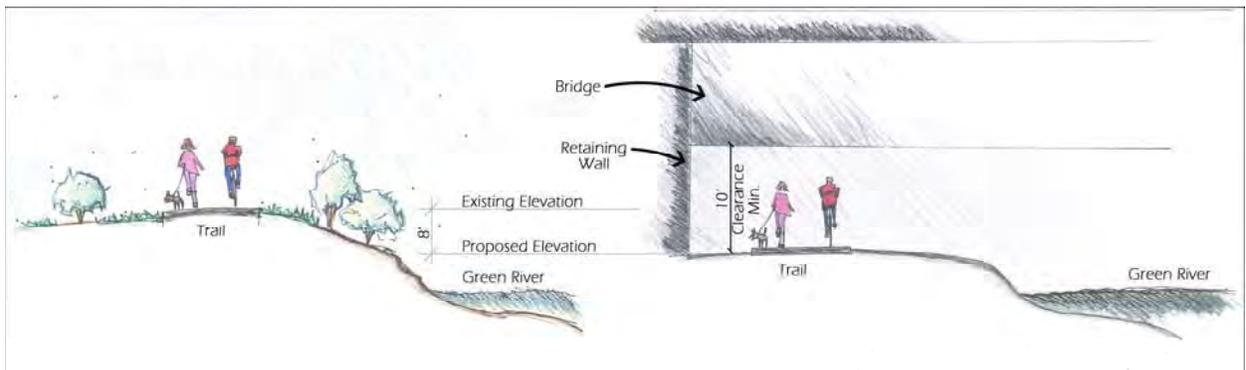
Refinements to on-ramp configurations to provide smooth through-movements would result in an effect on the Duwamish-Green River Trail that would be unavoidable.

Based on coordination with the RCO and the NPS, the protected Section 4(f) and 6(f) trail comprises a width of 14 feet. While no land would be permanently incorporated into the transportation facility, the trail's slope would be revised to ensure adequate clearance for the trail beneath the bridges. FHWA and WSDOT determined this construction activity would result in a temporary occupancy of the protected Section 4(f) resource. A minimum 10-foot vertical clearance would be maintained between the Tukwila Parkway bridge and the trail. The trail would be lowered by up to eight feet. See Exhibits 5-1 and 5-2.

Exhibit 5-1: Duwamish-Green River Trail/Christensen Greenbelt Impact Area



Exhibit 5-2: Profiles of the Existing Trail and the Proposed Trail Beneath the New Tukwila Parkway Bridge



The occupancy would be temporary because:

- The disruption to the trail would require less time than the construction period for the entire project;
- There would be no change in ownership;

- The nature and the magnitude of the changes to the Section 4(f) resource would be minimal;
- There would be no anticipated permanent adverse physical impacts and there would be no interference with the activities or purpose of the resource, on either a temporary or permanent basis;
- The land being used would be restored to a condition which is at least as good as that prior to the project; and
- WSDOT and the City of Tukwila have agreed to the temporary occupancy of the resource. A copy of a letter between the two agencies is in Appendix B.

There would be no direct use under Section 4(f) because the bridges would span the trail and the piers for the bridges would not be located within the 14-foot-wide trail property. Constructive uses would not occur with the proposed modifications to the trail. Currently, five existing bridges cross over the trail within the study area. The proposed new bridge would be constructed adjacent to the existing bridges. Conditions experienced by the trail user would remain relatively unchanged with respect to noise, air quality, and visual quality. The exposure and duration of exposure to noise and views would not be substantially altered because the trail would continue to cross beneath each bridge as it does today and the proposed bridge would be a similar scale and style.



Existing View



Proposed View

Duwamish-Green River Trail Trailhead

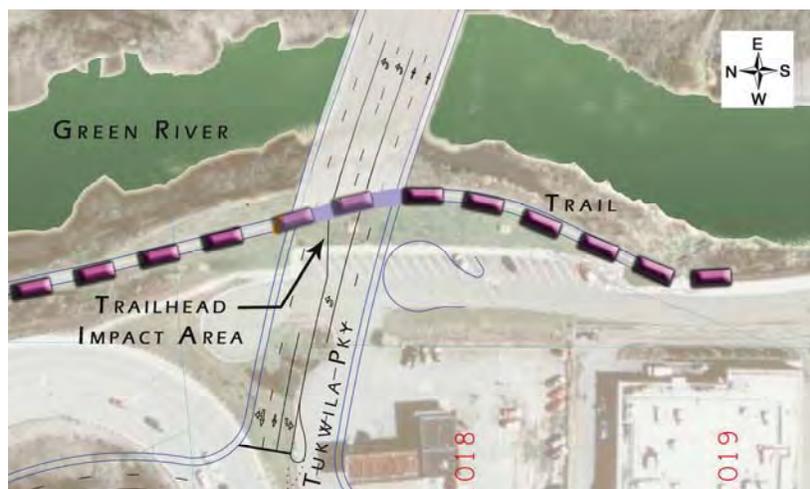
The Build Alternative construction proposed in the vicinity of the Duwamish-Green River Trail Trailhead includes:

- Reconstructing the south half of the SR 181 interchange. This would include removing the existing Tukwila Parkway northbound on-ramp; extending Tukwila Parkway east to SR 181 over the Green River, trailhead, and Duwamish-Green River Trail; and constructing a new on-ramp from Tukwila Parkway to northbound I-405.
- Reconstructing the northbound and southbound I-405 bridges over the Green River and the Duwamish-Green River Trail.
- Demolishing the existing 66th Avenue S (Christensen Road) bridge.

- Constructing a new 66th Avenue S bridge immediately west of the existing location.

Approximately 4,500 square feet or 0.1 acres of land from the trailhead would be permanently incorporated into the transportation facility as a result of the construction of the Tukwila Parkway extension. The property that would be affected includes passive recreation uses, landscaping, trail access and 13 parking stalls. The 13 parking stalls would be replaced west of the existing parking lot. See Exhibits 5-3 and 7-1.

Exhibit 5-3: Impact Area at Duwamish-Green River Trail Trailhead



Fort Dent Park

The Build Alternative proposes to modify the intersection at Fort Dent Way/Interurban Avenue S/I-405 on- and off-ramps, which provide access to the park.

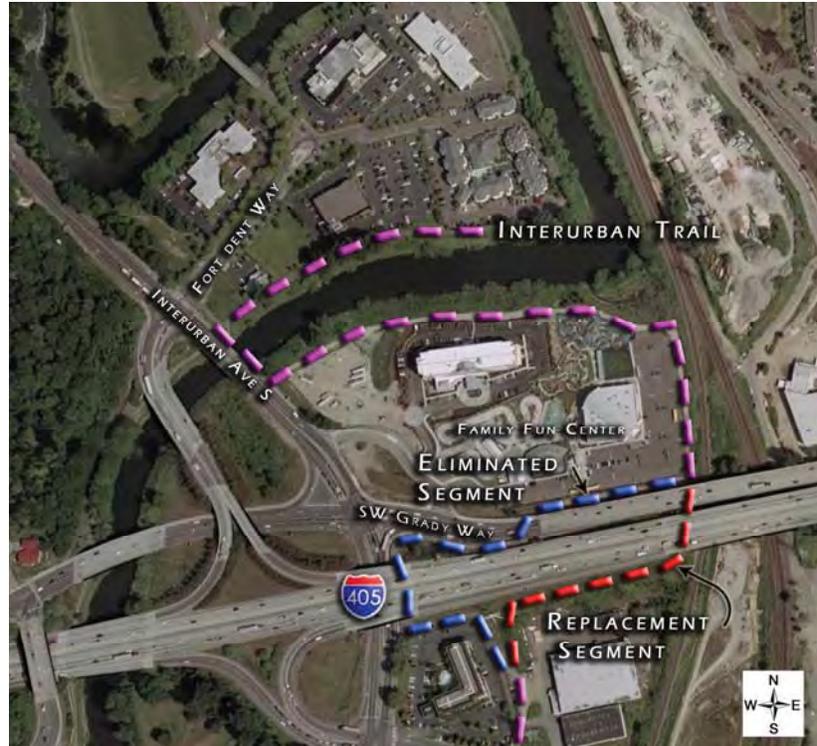
No land would be acquired, either permanently or temporarily, from this park, because access will be maintained.

Interurban Trail

In the vicinity of the Interurban Trail, WSDOT proposes to add one lane in each direction, build new bridges over SR 181 and the railroads, and reconstruct a section of I-405. WSDOT coordinated with the City of Tukwila Parks Department during development of the Build Alternative. This coordination resulted in a design that proposes to realign the trail, creating a smoother-flowing route that would cross under I-405 parallel to the Union Pacific railroad. The realignment to replace the current indirect route would be done in conjunction with reconstruction of the I-405 bridges over the railroads. The re-

aligned trail would be reconstructed within WSDOT right-of-way. In Exhibit 5-4, the trail segment highlighted in blue would be replaced with the segment highlighted in red.

Exhibit 5-4: Realignment of Interurban Trail



No land would be permanently acquired from this trail. There would be temporary occupancy during construction; however, the occupancy would not rise to a use under Section 4(f) because:

- The disruption to the trail would require less time than the construction period for the entire project;
- There would be no change in ownership;
- The nature and the magnitude of the changes to the Section 4(f) resource would be minimal;
- There would be no anticipated permanent adverse physical impacts and there would be no interference with the activities or purpose of the resource, on either a temporary or permanent basis;
- The new trail alignment would be constructed to a condition which is at least as good as that prior to the project; and

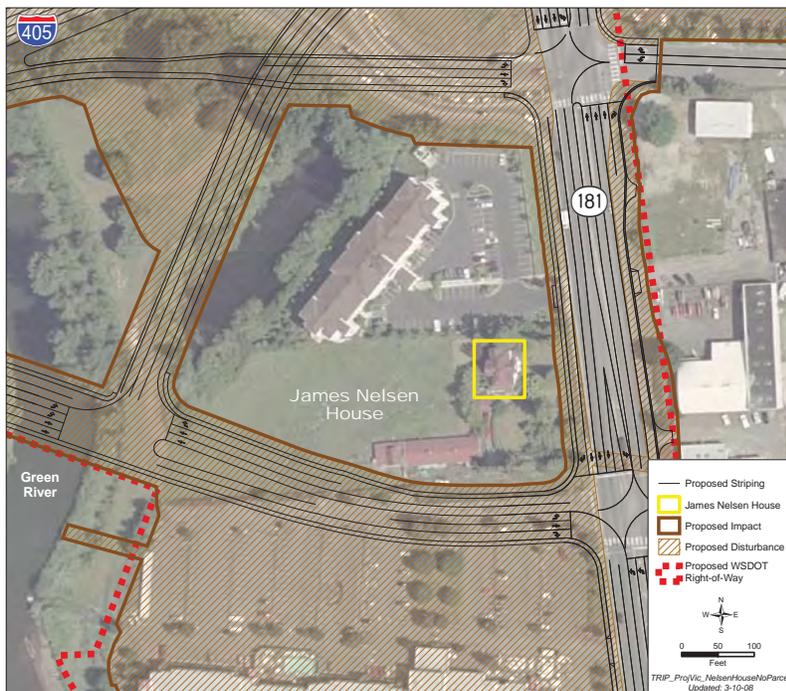
- WSDOT and the City of Tukwila have agreed to the temporary occupancy of the resource. A copy of a letter between the two agencies is in Appendix B.

The proposed trail realignment would not alter its proximity to I-405. Constructive uses would not be triggered by the proposed construction. Conditions experienced by the trail user would remain relatively unchanged or slightly improved with respect to noise, air quality, and visual quality. Currently, the trail crossing beneath I-405 is adjacent to SR 181. When it is realigned, the trail would be further from SR 181 and thus further from noise generated along SR 181.

James Nelsen House

The Tukwila to Renton Project proposes to extend Tukwila Parkway east to SR 181 and construct a new on-ramp to northbound I-405 in the vicinity of the James Nelsen House. While the project would result in permanent acquisition of non-Section 4(f)-protected property adjacent to the James Nelsen House, this acquisition would have no affect on the integrity of the historic structure (see Exhibit 5-5). The acquisition of property would also not preclude the use of the James Nelsen House.

Exhibit 5-5: Proposed Tukwila Parkway and SR 181/I-405 Interchange Next to James Nelsen House



There would be no direct, temporary, or constructive uses of the James Nelsen House. Modeling demonstrated that noise levels would increase and begin to approach the NAC for residences, but would not reach a dBA level that would constitute a use. Air quality is expected to improve slightly as traffic from the adjacent freeway would operate more efficiently. Views from the James Nelsen House would be altered by the construction of the Tukwila Parkway Bridge. However, the current setting of the James Nelsen House is adjacent to the I-405/SR 181 interchange and within a commercially zoned area. The addition of the Tukwila Parkway extension and the acquisition of property would not substantially change the current views from the house.

Springbrook Trail

During construction of the Renton Nickel Improvement Project, (1) the bridge spanning Springbrook Creek and Springbrook Trail was replaced with two new bridges that span the creek, trail, and Oakesdale Avenue and (2) a stormwater flow control facility was constructed adjacent to the trail. The Tukwila to Renton Project would add one lane in both directions on I-405 over the trail by restriping the lanes.

No land would be acquired, either permanently or temporarily, from this trail.

Gateway Park and Piazza Park

Gateway and Piazza Parks are located almost 0.25 mile from the proposed limits of construction.

No land would be acquired, either permanently or temporarily, from these parks.

Burnett Linear Park

Burnett Linear Park is located almost 0.25 mile from the proposed limits of construction.

No land would be acquired, either permanently or temporarily, from this park.

Cedar River Trail – South Loop

The South Loop of the Cedar River Trail is almost 0.25 mile from the proposed limits of construction.

No land would be acquired, either permanently or temporarily, from this park.

Tonkins Park

Tonkins Park is almost 0.25 mile from the proposed limits of construction.

No land would be acquired, either permanently or temporarily, from this park.

Veterans Memorial Park

Two design options are proposed in the vicinity immediately adjacent to Veterans Memorial Park. Both options would involve changing traffic flow patterns on Main Avenue S and Mill Avenue S due to the proposed closure of Houser Way N east of Mill Avenue S.

The Mill Avenue design option would direct traffic from Main Avenue S, Houser Way N, and S 3rd Street to Mill Avenue S and on to Bronson Way N. This would be accomplished by restriping Mill Avenue S as a one-way street between S 2nd Street and Bronson Way N and installing a traffic light at the intersection of Mill Avenue S and S 2nd Street. Bronson Way N would also be restriped for an additional northbound lane. See Exhibit 2-13.

The Main Avenue design option would convert Main Avenue S from a one-way to a two-way street and would direct traffic from S 3rd Street and Houser Way to Bronson Way N. To accommodate the two-way street, Main Avenue S would be widened. The widening would require acquisition of approximately a 16-foot strip of right-of-way. See Exhibit 2-14.

Mill Avenue Design Option

The Mill Avenue design option is a prudent and feasible alternative. No land would be acquired, either permanently or temporarily, from Veterans Memorial Park.

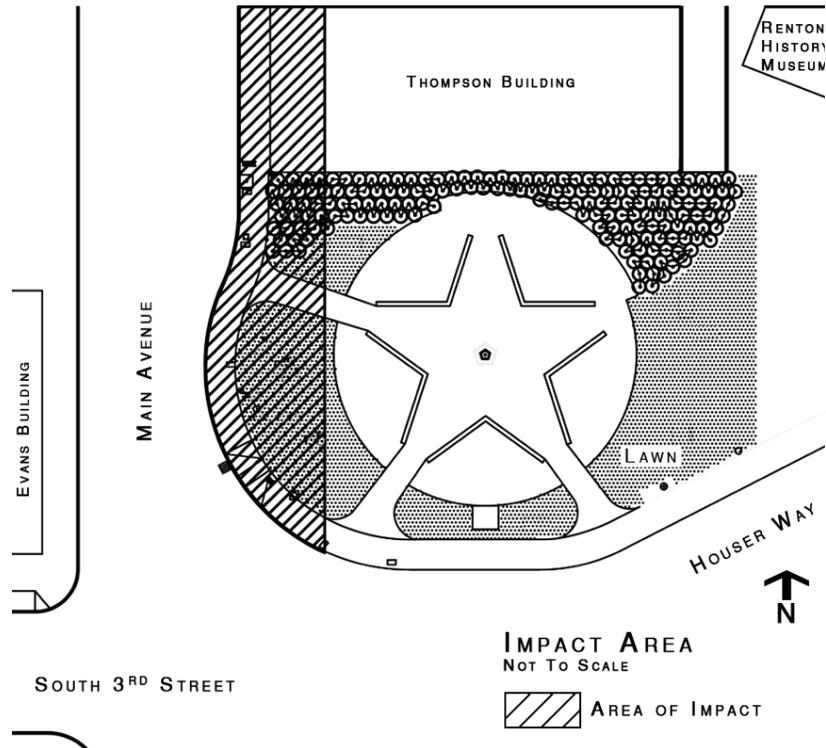
Main Avenue Design Option

This option would require the permanent acquisition of 2,087 square feet of Veterans Memorial Park. The affected area within the park is characterized by ornamental landscaping, lawn, and a walkway from the sidewalk to the memorial statuary.

Veterans Memorial Park would also be subject to temporary occupancy during project construction. Another 1,346 square

feet would be affected temporarily. Because the use would be temporary and the land being used would be restored to a condition which is at least as good as that prior to the project, it would not be defined as a Section 4(f) use. Exhibit 5-6 illustrates the affected area.

Exhibit 5-6: Main Avenue Design Option and Veterans Memorial Park



Source: Cal Jordan, Inc.

The results of the alternatives analysis demonstrate that the Mill Avenue design option is both feasible and prudent and would avoid permanent direct use of Veterans Memorial Park. In recent discussions with the City of Renton, WSDOT has learned that the City plans to potentially develop a civic center campus in the vicinity of Mill and Main Avenues and may possibly relocate Veterans Memorial Park. These plans are currently conceptual and lack funding. However, when funding is secured for this portion of the I-405 Tukwila to Renton project, FHWA and WSDOT may update its Section 4(f) analysis to include the most current baseline condition. If at that point Veterans Memorial Park is relocated by the City from its current location, the Main Avenue design option may be reanalyzed.

Renton History Museum

The Renton History Museum has been determined as eligible for listing in the NRHP (WSDOT 2005). It is listed on the Washington Heritage Register and is architecturally distinctive due to its Art Deco design elements, workmanship, detailing of architectural elements, and its commercial district setting. Both the Mill Avenue and Main Avenue design options would be adjacent to the Renton History Museum.

The Mill Avenue design option would be the preferred prudent and feasible alternative because it would not result in impacts at either Veterans Memorial Park or the Renton History Museum. This design option would not result in an increase in traffic volume adjacent to the Renton History Museum site. This option would redirect the same volume of traffic currently using Houser Way to Mill Avenue S. There would be no proximity effects because there would be no increase in traffic volume, and there would be no changes in the widths or alignments of Houser Way and Mill Avenue S.

No land would be acquired, either permanently or temporarily, from the property housing the museum.

Jones Park

Jones Park is almost 0.25 mile from the proposed limits of construction.

No land would be acquired, either permanently or temporarily, from this park.

Cedar River Park, Liberty Park, Cedar River Trail, and the Narco Property

The City of Renton proposes to integrate Cedar River Park, Liberty Park, and the Narco Property into one large integrated park complex. These three properties plus the Cedar River Trail share common borders, and their close proximity to each other and to I-405 enabled FHWA, WSDOT, and the City to analyze potential effects of the Tukwila to Renton Project collectively as well as separately. The proposed construction in the vicinity of these Section 4(f) resources includes:

- Constructing two additional lanes in both directions on I-405 from SR 167 to SR 169.

- Closing Houser Way S, removing the Houser Way bridge over the Cedar River, and rerouting traffic to a restriped Bronson Way N.
- Replacing three bridges over the Cedar River, including the northbound and southbound I-405 bridges and a pedestrian bridge.
- Relocating the Burlington Northern Santa Fe Railroad bridge.

Design Charrette

A charrette consists of an intense period of design activity. It is a collaborative session in which a group of stakeholders and technical experts draft a solution to a design problem.

As a precursor to identifying these I-405 improvements in Renton, the City of Renton and WSDOT undertook a design charrette to identify how the City of Renton recreational facilities at Liberty and Cedar River Parks, Cedar River Trail, and the Narco property and an improved (widened) I-405 could co-exist in a physically constrained area. The resulting charrette concept (formalized into a master plan adopted by the City of Renton) integrated Liberty and Cedar River Parks and the Narco property into one large park complex. The design scheme would redevelop the existing Liberty Park and Cedar River Park facilities, realign the Cedar River Trail, develop the Narco site with sports fields, and acquire an additional property to develop ball fields.⁷ The result will be a functionally improved and more integrated park system that accommodates the proposed I-405 improvements with less effect than would result under any other reasonable alternative. See Exhibit 5-7.

Some of the other specific design solutions, in what is now called the City of Renton Tri-Park Master Plan, included:

- Providing the primary entrance to Liberty Park at Garden Avenue and Bronson Avenue.
- Reconstructing the pedestrian bridge to link the Cedar River Trail and the parks and to make the trail as continuous as possible.
- Constructing a new bridge over the Cedar River for direct vehicular access between Cedar River Park and the Narco property.

⁷ *Cedar River Vicinity Charrette, Solutions for Parks, Wells & Local Access, Washington State Department of Transportation and City of Renton, July 11-14, 2005.*

Exhibit 5-7: Tri-Park Master Plan Adopted by City of Renton



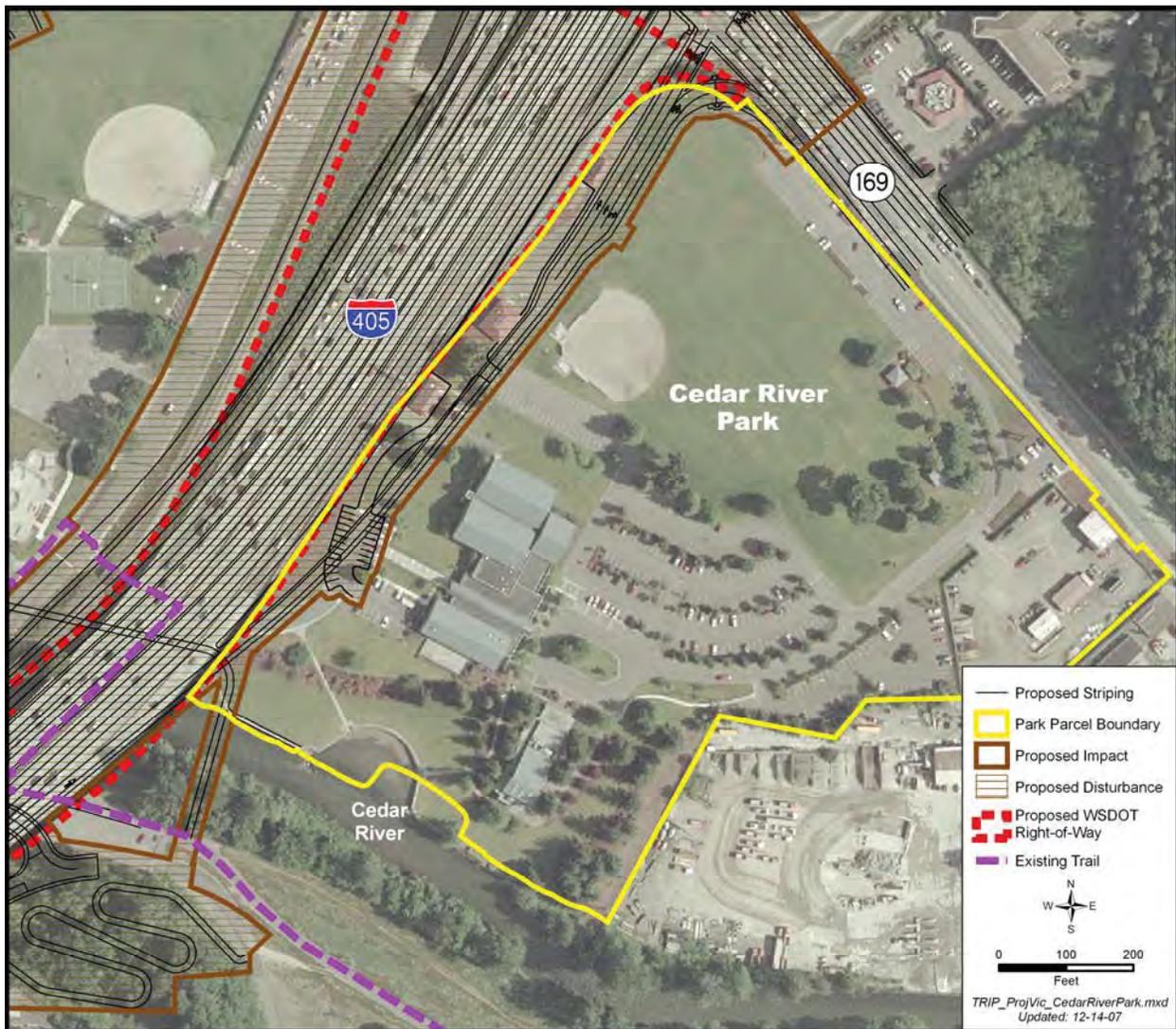
Source: City of Renton

- Removing ball fields and the stadium from Liberty Park and relocating them at the proposed Stoneway property acquisition.
- Expanding the Parks Department building to accommodate a new teen center.
- Demolishing the existing skate park and relocating a new skate park next to the teen center.
- Maintaining Carco Theater, the community center, the aquatic center, and the existing parking at Cedar River Park.
- Converting the soccer fields at Cedar River Park into a general purpose meadow to allow for future expansion of the aquatic center.
- Relocating the proposed southbound I-405 to southbound SR 169 flyover ramp to the median of SR 169 to maximize the distance between the water slides at the aquatic center

and the ramp. (This ramp is proposed as part of the Renton to Bellevue Improvement Project.)

As a result of the avoidance and minimization of effects accomplished through the design charrette, there would be no land permanently acquired from Liberty Park, Cedar River Trail, and the Narco property. Permanent acquisition of Section 4(f) protected resources at Cedar River Park includes 35,752 square feet or 0.82 acres. See Exhibit 5-8.

Exhibit 5-8: Direct Use at Cedar River Park



The affected area supports a mix of park and non-recreation uses, including, but not limited to, access to several City of Renton pumps, wells, and associated water supply system facilities; parking for the community center; a ballfield; and the landscape buffer between I-405 and the park.

While the proposed direct uses can be measured and expressed in a quantifiable area, both WSDOT and the City of Renton concur that the Tukwila to Renton Project would impose other, even though less quantifiable, adverse uses to the recreation environments at Liberty Park, Cedar River Park, Cedar River Trail, and the Narco property. These uses would include:

- Reconstructing the pedestrian bridge for the Cedar River Trail over the Cedar River.
- Replacing one of the Cedar River Park accesses with a new secondary access.
- Reconfiguring the service access and parking on west side of the Community Center at Cedar River Park.
- Removing and replacing landscaping at the northwest corner of Cedar River Park.
- Relocating the SR 169 entrance to Cedar River Park further south along SR 169.
- Eliminating major access to Liberty Park by removing the Houser Way Bridge.
- Modifying the existing access road under I-405 to the Narco property.

WSDOT and the City arrived at a consensus on necessary and desirable park improvements and further concurred on whether each park improvement would be considered mitigation for effects as a result of the I-405 project or would be city-desired recreation improvements. The overall design was presented to and approved by the Renton City Council on April 27, 2006. The decisions are summarized in Section 7, Exhibit 7-2. A signed Letter of Concurrence between WSDOT and the City of Renton is in Appendix A.

What effects would occur under the No Build Alternative?

The No Build Alternative assumes that the improvements associated with the Renton Nickel Improvement Project are constructed and that only routine activities such as road maintenance, repair, and safety improvements would take place between 2014 and 2030. This alternative does not include improvements that would increase roadway capacity or reduce congestion. For these reasons, it does not satisfy the

project's purpose to reduce congestion on I-405 between I-5 in Tukwila and SR 169 in Renton.

Under the No Build Alternative, the use of Section 4(f) resources would be avoided. However, it is not considered to be a feasible and prudent alternative as it would not reduce congestion and increase roadway capacity on I-405.

The No Build Alternative would have an adverse affect on the City of Renton Tri-Park Master Plan. The implementation of the City Master Plan improvements at Cedar River Park, Liberty Park, Cedar River Trail, and at the Narco property is contingent on WSDOT proceeding with the Tukwila to Renton Project. The No Build Alternative would cause the City to re-evaluate the Master Plan for recreation facilities at these Section 4(f) resources.

SECTION 6 FEASIBLE AND PRUDENT ALTERNATIVES

Are there feasible and prudent alternatives that would avoid use of the Section 4(f) resources?

Duwamish-Green River Trail/Christensen Greenbelt, Duwamish-Green River Trail, James Nelsen House, and Interurban Trail

To meet project objectives for improved operations consistent with the project purpose, WSDOT identified the need to improve access from Tukwila Parkway to northbound I-405. Currently, the northbound on-ramp to I-405 serves a major regional commercial center. This on-ramp is too short to allow effective traffic movement; its design speed is 20 mph, which is lower than the 25 mph minimum; and there is no storage for ramp metering.

Prior to selecting the Build Alternative, WSDOT studied eleven alternatives for improving the I-405/SR 181 interchange and improving access from Tukwila Parkway to northbound I-405, while also attempting to avoid and minimize effects on the four Section 4(f) resources in the immediate vicinity. Drawings of these alternatives have been included as Appendix C. Exhibit 6-1 briefly describes each alternative, summarizes the findings of the analysis, and addresses the extent to which each alternative would avoid or affect Section 4(f) historic and park properties.

No feasible and prudent alternatives exist to connect Tukwila Parkway to northbound I-405 without extending Tukwila Parkway east across the Green River. Because the Duwamish-Green River Trail/Christensen Greenbelt parallels the Green River, none of the alternatives studied can avoid this Section 4(f) park property. One alternative, Alternative A, would avoid the property adjacent to the James Nelsen House, but during analysis it was determined this alternative would not be prudent because it did not meet the mobility objective of the project—that is roadway capacity would not be sufficient to handle the projected traffic demand. Alternatives J and K would avoid the James Nelsen House, but both of these alternatives would eliminate access to the structure.

The effects on the Section 4(f) resources are fairly similar across all of the remaining alternatives and none are able to avoid use

of the trailhead. Given the fact that the preferred alternative, Alternative D, is no worse than any of the remaining alternatives, it was selected because it is the alternative that would provide the most improved mobility and would not impede access to the James Nelsen House.

Exhibit 6-1: Section 4(f) Resources and Tukwila Parkway On-ramp Alternatives

Alternative Description	Duwamish-Green River Trail/ Christensen Greenbelt	Duwamish-Green River Trail Trailhead	James Nelsen House	Interurban Trail	Fatally Flawed	Comments
Alt. A would construct two NB on-ramps, one from Tukwila Parkway/Andover West intersection and one from SR 181.	○	●	○	○	Yes ¹	<ul style="list-style-type: none"> • Tukwila Parkway - NB I-405 on-ramp constructed over Duwamish-Green River Trail. • Tukwila Parkway - NB I-405 on-ramp constructed over current trailhead. • SB I-405 and Tukwila Parkway to NB I-405 and SR 181 to NB I-405 on-ramps constructed over Interurban Trail.
Alt. B would extend Tukwila Parkway east across the Green River, construct an on-ramp to the east of SR 181 and connect to Longacres Drive. It would construct an off-ramp to the west of SR 181.	○	●	○	○	Yes ¹	<ul style="list-style-type: none"> • Tukwila Parkway Extension and NB I-405 off-ramp constructed over Duwamish-Green River Trail. • Tukwila Parkway Extension constructed over current trailhead. • SB I-405 and SR 181/S 158th to NB I-405 on-ramp constructed over Interurban Trail.
Alt. C would extend Tukwila Parkway east across the Green River and construct a collector/distributor road west of SR 181.	○	●	○	○	Yes ¹	<ul style="list-style-type: none"> • Tukwila Parkway Extension constructed over Duwamish-Green River Trail. • Tukwila Parkway Extension constructed over current trailhead. • SB I-405 and SR 181 to NB I-405 on-ramp constructed over Interurban Trail.

Legend: ○ No Use; ● Potential Use NB = northbound SB = southbound SPUI: Single Point Urban Interchange

1. This alternative has insufficient weave distance between the SR 181 to NB I-405 on-ramp and the NB I-405 to SR 167 off-connection to provide acceptable I-405 operations and would create a safety hazard. This alternative does not provide the reduced congestion and improved mobility identified as the purpose for the I-405 Corridor Program and is therefore considered to be fatally flawed.

Exhibit 6-1: Section 4(f) Resources and Tukwila Parkway On-ramp Alternatives (continued)

Alternative Description	Duwamish-Green River Trail/ Christensen Greenbelt	Duwamish-Green River Trail Trailhead	James Neisen House	Interurban Trail	Fatally Flawed	Comments
Alt. D would extend Tukwila Parkway east across the Green River and would construct an on- and off-ramp from I-405 west of SR 181.	○	●	○	○	No	<ul style="list-style-type: none"> • Tukwila Parkway Extension and NB I-405 off-ramp constructed over Duwamish-Green River Trail. • Tukwila Parkway Extension constructed over current trailhead. • SB I-405 and Tukwila Parkway Extension to NB I-405 on-ramp constructed over Interurban Trail.
Alt. E would extend Tukwila Parkway east across the Green River and construct ramps connecting NB 405 to SR 181 on the east side of SR 181 and connecting to Longacres Drive.	○	●	○	○	Yes ¹	<ul style="list-style-type: none"> • Tukwila Parkway Extension constructed over Duwamish-Green River Trail. • Tukwila Parkway Extension constructed over current trailhead. • SB I-405, NB I-405 to SR 181/S 158th off-ramp, and SR 181/S 158th to NB I-405 on-ramp constructed over Interurban Trail.
Alt. F would extend Tukwila Parkway east across the Green River and co-locate NB 405 on-and off-ramps with the Tukwila Direct Access ramp from Longacres Drive.	○	●	○	○	Yes ¹	<ul style="list-style-type: none"> • Tukwila Parkway Extension constructed over Duwamish-Green River Trail. • Tukwila Parkway Extension constructed over current trailhead. • SB I-405 constructed over Interurban Trail.
Alt. G would extend Tukwila Parkway east across the Green River and incorporate roundabouts on Tukwila Parkway and Southcenter Boulevard.	○	●	○	○	Yes ¹	<ul style="list-style-type: none"> • Tukwila Parkway Extension constructed over Duwamish-Green River Trail. • Tukwila Parkway Extension constructed over current trailhead. • SB I-405 constructed over Interurban Trail.

Legend: ○ No Use; ● Potential Use NB = northbound SB = southbound SPU: Single Point Urban Interchange

1. This alternative has insufficient weave distance between the SR 181 to NB I-405 on-ramp and the NB I-405 to SR 167 off-connection to provide acceptable I-405 operations and would create a safety hazard. This alternative does not provide the reduced congestion and improved mobility identified as the purpose for the I-405 Corridor Program and is therefore considered to be fatally flawed.

Exhibit 6-1: Section 4(f) Resources and Tukwila Parkway On-ramp Alternatives (continued)

Alternative Description	Duwamish-Green River Trail/ Christensen Greenbelt	Duwamish-Green River Trail Trailhead	James Nelsen House	Interurban Trail	Fatally Flawed	Comments
<p>Alt. H would extend Tukwila Parkway east across the Green River and construct a SPUI at SR 181 with Grady Way relocated south to S 158th Street via Longacres Drive.</p>	○	●	○	○	Yes ¹	<ul style="list-style-type: none"> • Tukwila Parkway Extension, NB I-405 to SR 181 off-ramp and SR 181 to SB I-405 on-ramp constructed over Duwamish-Green River Trail. • Tukwila Parkway Extension constructed over current trailhead. • SB and NB I-405, SB I-405 to SR 181 off-ramp, and SR 181 to NB I-405 on-ramp constructed over Interurban Trail.
<p>Alt. I would extend Tukwila Parkway east across the Green River and construct a SPUI at SR 181 with Grady Way relocated north of Embassy Suites hotel to new intersection with SR 181 and Southcenter Boulevard.</p>	○	●	○	○	Yes ¹	<ul style="list-style-type: none"> • Tukwila Parkway Extension, NB I-405 to SR 181 off-ramp and SR 181 to SB I-405 on-ramp constructed over Duwamish-Green River Trail. • Tukwila Parkway Extension constructed over current trailhead. • SB and NB I-405, SB I-405 to SR 181 off-ramp, and SR 181 to NB I-405 on-ramp constructed over Interurban Trail.
<p>Alt. J would extend Tukwila Parkway east across the Green River and also extend the NB off-ramp east across the Green River.</p>	○	●	●	○	No	<ul style="list-style-type: none"> • Tukwila Parkway Extension and NB I-405 to SR 181 off-ramp constructed over Duwamish-Green River Trail. • Tukwila Parkway Extension constructed over current trailhead. • On and off-ramp locations on SR 181 at S 158th result in loss of access to the house. • NB I-405, NB I-405 to SR 181 off-ramp, and SR 181 to NB I-405 on-ramp constructed over Interurban Trail.
<p>Alt. K would extend Tukwila Parkway east across the Green River and also extend the NB off-ramp east across the Green River.</p>	○	●	●	○	No	<ul style="list-style-type: none"> • Tukwila Parkway Extension and NB I-405 to SR 181 off-ramp constructed over Duwamish-Green River Trail. • Tukwila Parkway Extension constructed over current trailhead. • On and off-ramp locations on SR 181 at S 158th result in loss of access to the house. • NB I-405 and SR 181 to NB I-405 on-ramp constructed over Interurban Trail.

Legend: ○ No Use; ● Potential Use NB = northbound SB = southbound SPUI: Single Point Urban Interchange

1. This alternative has insufficient weave distance between the SR 181 to NB I-405 on-ramp and the NB I-405 to SR 167 off-connection to provide acceptable I-405 operations and would create a safety hazard. This alternative does not provide the reduced congestion and improved mobility identified as the purpose for the I-405 Corridor Program and is therefore considered to be fatally flawed.

Exhibit 6-1: Section 4(f) Resources and Tukwila Parkway On-ramp Alternatives (continued)

Alternative Description	Duwamish-Green River Trail/ Christensen Greenbelt	Duwamish-Green River Trail Trailhead	James Nelsen House	Interurban Trail	Fatally Flawed	Comments
Alt. J would extend Tukwila Parkway east across the Green River and also extend the NB off-ramp east across the Green River.	○	●	●	○	No	<ul style="list-style-type: none"> • Tukwila Parkway Extension and NB I-405 to SR 181 off-ramp constructed over Duwamish-Green River Trail. • Tukwila Parkway Extension constructed over current trailhead. • On and off-ramp locations on SR 181 at S 158th result in loss of access to the house. • NB I-405, NB I-405 to SR 181 off-ramp, and SR 181 to NB I-405 on-ramp constructed over Interurban Trail.
Alt. K would extend Tukwila Parkway east across the Green River and also extend the NB off-ramp east across the Green River.	○	●	●	○	No	<ul style="list-style-type: none"> • Tukwila Parkway Extension and NB I-405 to SR 181 off-ramp constructed over Duwamish-Green River Trail. • Tukwila Parkway Extension constructed over current trailhead. • On and off-ramp locations on SR 181 at S 158th result in loss of access to the house. • NB I-405 and SR 181 to NB I-405 on-ramp constructed over Interurban Trail.

Legend: ○ No Use; ● Potential Use NB = northbound SB = southbound SPUI: Single Point Urban Interchange

1. This alternative has insufficient weave distance between the SR 181 to NB I-405 on-ramp and the NB I-405 to SR 167 off-connection to provide acceptable I-405 operations and would create a safety hazard. This alternative does not provide the reduced congestion and improved mobility identified as the purpose for the I-405 Corridor Program and is therefore considered to be fatally flawed.

Veterans Memorial Park

Two design options were developed in the vicinity of Veterans Memorial Park to accommodate local traffic access following removal of Houser Way bridge. These options, Mill Avenue and Main Avenue, are discussed in detail in Chapters 2 and 5. The Mill Avenue design option would avoid use of Veterans Memorial Park.

The results of the alternatives analysis demonstrate that the Mill Avenue design option would be both feasible and prudent and would avoid permanent direct use of Veterans Memorial Park.

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SECTION 7 MEASURES TO AVOID OR MINIMIZE EFFECTS

What measures did we include in the project to avoid or minimize harm to the Section 4(f) resources during construction?

Duwamish-Green River Trail/Christensen Greenbelt

During construction, a segment of the Duwamish-Green River Trail/Christensen Greenbelt where it crosses beneath the Southcenter Boulevard bridge, the I-405 bridges, and the Tukwila Parkway bridge would be closed for public safety reasons. A signed detour would be provided during the closure and notices would be posted to keep the public informed about the construction. The City and WSDOT would work together to determine appropriate detours and signage during construction. The trail and disturbed trail edges would be restored following construction pursuant to the *I-405 Context-Sensitive Solutions Master Plan*.⁸

Duwamish-Green River Trail Trailhead

During construction, the trailhead would be closed for public safety reasons. Notices would be posted to keep the public informed about the construction. The City of Tukwila and WSDOT would work together to determine appropriate detours during construction. The trailhead would be restored by replacing existing picnic tables, signs, trash receptacles, and landscaping. WSDOT proposes to replace the displaced parking adjacent to the proposed stormwater detention site immediately west of the existing parking lot. See Exhibit 7-1.

⁸ WSDOT 2006

Exhibit 7-1: Proposed Replaced Parking



Interurban Trail

The trail would remain open during construction except when safe travel may be compromised. A trail detour would be in place to accommodate trail users during short-term closures. The City of Tukwila and WSDOT would work together to determine appropriate detours during construction. As needed, the construction site would be cordoned off with high visibility fencing and trail traffic would be controlled by a flagger.

Fort Dent Park

The Build Alternative would not restrict access to the park. While ingress and egress may be interrupted and/or delayed, the park entrance would remain open and flaggers would direct general park traffic through construction zones.

James Nelsen House

During construction, fencing would be placed to establish the limits of construction and ensure there would be no encroachment near the historic structure. Retaining walls to minimize the footprint and avoid the historic structure are an integral component in the Tukwila Parkway design. Areas that would be disturbed by construction, including landscaping, would be restored in kind.

Springbrook Trail

The Build Alternative would not restrict access to this trail. WSDOT would ensure that the trail remains in operation during construction and would provide signs and safety barriers as necessary to inform and protect trail users. No effects would occur to trail use.

Veterans Memorial Park

The Mill Avenue Design Option was selected. All effects are avoided with the construction of this design option.

Cedar River Park, Liberty Park, Cedar River Trail, and the Narco Property

As discussed in Section 5, WSDOT and the City of Renton arrived at a consensus on necessary and desirable park improvements and further concurred on whether each park improvement would be considered mitigation for effects as a result of the I-405 project or would be city-desired recreation improvements. Exhibit 7-2 summarizes the key decisions concerning avoidance and minimization of effects, proposed mitigation for I-405 effects, and the city-proposed master plan improvements for park and recreation development at each Section 4(f) resource.

Both the City and WSDOT would have distinct scope and funding responsibilities to implement the agreed approach in the Tri-Parks area. However, neither agency has secured its funding to implement their portions of the shared plan. It is WSDOT's intent to implement the Section 4(f) mitigation during construction of the project. However, if the City's own funding and timeline for implementation makes this not practical, then the City and WSDOT would work together to develop a strategy to effectively implement both parties' responsibilities as agreed to in the signed concurrence memorandum found in Appendix A.

Exhibit 7-2: Key Decisions Regarding Cedar River Park, Cedar River Trail, Liberty Park, and Stoneway and Narco Properties

Design Feature	Avoidance & Minimization	Mitigation for I-405 Effects	City Master Plan Improvements
Cedar River Park and Cedar River Trail			
Reconstruct pedestrian bridge and trail over Cedar River		X	
Acquire right-of-way from park for construction of northbound off-ramp			
<ul style="list-style-type: none"> Effects baseball/soccer multi-use field. WSDOT will replace with comparable baseball/soccer multi-use field. 		X	
<ul style="list-style-type: none"> Acquire air-rights for ramp 		X	
Replace park access from north (under I-405 near the Cedar River) with new secondary access to park (over Cedar River from Narco property)		X	
Reconfigure service access and parking to west side of community center. Replacement parking may be located under new ramp.		X	
Avoid effect to Carco Theater	X		
Avoid effect to community center	X		
Provide activity meadow		X	
Provide shelter near activity meadow			X
Expand pool and water activity area			X
Provide visual screening landscape at northwest corner of park		X	
Landscape the north bank of the Cedar River			X
Relocate the park entrance off of SR 169 about 250 feet east.		2/3	1/3
Shift flyover alignment to SR 169 median			
<ul style="list-style-type: none"> Avoid impact to park property footprint 	X		
<ul style="list-style-type: none"> Reduce visual encroachment to park (aquatic facilities) 		X	
Determine and address potential noise and aesthetic effects through the environmental process		X	

Exhibit 7-2 (continued)

Design Feature	Avoidance & Minimization	Mitigation for I-405 Effects	City Master Plan Improvements
Liberty Park			
Create new park access off of Bronson Way with the elimination of the Houser Way/Bronson Way intersection			
<ul style="list-style-type: none"> Replaces access from the south to Liberty Park Relocates access to teen center Eliminates ball park stadium Converts abandoned Houser Way parking to recreation use 		X	
Upgrade trail system to accommodate maintenance and emergency vehicles		X	
Convert abandoned Houser Way to service access road		X	
Relocate tennis courts		½	½
Relocate skate park			
<ul style="list-style-type: none"> Provides area for maintenance access to wells 1, 2, and 3 Replaces drive-by security lost with closure of Houser Way 		X	
Reconfigure picnic/tot-play area			X
Relocate "small" ball field			X
Expand teen center			X
Relocate basketball courts			X
Create "meadow" area to replace stadium and skate park		X	
Create "meadow" area to replace "mini" ball field			X
Extend railroad structure span north to reduce embankment and provide connectivity to adjacent parks			X
Stoneway Property¹			
Acquire Stoneway property to support			
<ul style="list-style-type: none"> Two athletic fields - to replace "Big Liberty" ball field and Cedar River combination (soccer/baseball) field One athletic field - to replace "Small Liberty" ball field 		X	X
Construct two athletic fields to replace the "Big Liberty" ball field and Cedar River combination (soccer/baseball) field, along with restrooms, concessions, and parking sufficient to support these two fields		X	
Construct one athletic field to replace the "Little Liberty" ball field, along with restrooms and parking facilities above those facilities needed to support the athletic field replacements for the "Big Liberty" ball field and Cedar River combination field noted in the above item.			X
¹ . Because the Stoneway property is in private ownership, it is not a Section 4(f) resource. It is included here because it is part of the "Tri-Park Master Plan."			

Exhibit 7-2 (continued)

Design Feature	Avoidance & Minimization	Mitigation for I-405 Effects	City Master Plan Improvements
Narco Property			
Construct soccer fields			X
Construct parking for fields			X
Construct pedestrian access from Renton Hill		X	
Improve existing access road under I-405 to the Narco property. It will also serve as secondary emergency access to Renton Hill.		X	
Extend new structure over Cedar River to grade separate trail/ pedestrian crossing.		X	

SECTION 8 REFERENCES

GIS data sources

Exhibits 4-2 and 4-3

- Washington State Department of Transportation (WSDOT).
2007 Historic Sites, Study Area Boundary.
2006 – 2007 I-405 Staff for Osborn Pacific Group Inc.
2006 – 2007 I-405 Staff. Project Limits.

Exhibits 4-4, 4-5, 4-6, 4-7, 4-8, 4-10, 4-11, 4-12, 4-13, 4-14, 4-16, 4-17, and 5-5

- Europa Technologies: Google Earth.
2007 Osborn Pacific Group Inc. Park Boundaries.

Exhibit 4-9

- City of Renton.
2005 Preliminary Draft Trails Plan.

Exhibit 5-3

- Cal Jordan Associates.
2000 Site Plan.

Exhibit 5-7

- City of Renton and WSDOT.
2005 Cedar River Vicinity Charrette.

Base Data

All GIS exhibits contain one or more of the following as base layers:

- Geographic Data Technology, Inc. (GDT).
2005 GDT – Dynamap Transportation. April 2005.
- King County Standard GIS Data Disk, extract June 2006:
2004 Cities with annexations.
2005 Open Water.
2006 Parks in King County. Data updated by I-405 staff to match data from cities of Renton and Tukwila.
2005 Streams and Rivers. Data updated by I-405 staff to match fieldwork, 2002 LiDAR, and orthorectified aerial photography.

2005 Trails in King County. Data updated by I-405 staff to match fieldwork, 2002 LiDAR and orthorectified aerial photography.

United States Geological Survey (USGS).

2002 Color Aerial Photography. June 2002.

<http://edc.usgs.gov/products/aerial/hiresortho.html>

Washington State Department of Transportation (WSDOT).

2001 Aerial photography program. March 2001.

1997 Spatial Data Catalog, Railroads.

Text references and verbal communications

Published Documents and Websites

Federal Highway Administration (FHWA)

2007 www.fhwa.dot.gov/environment/4fpol2.htm.

Interagency Committee for Outdoor Recreation

2007 www.iac.wa.gov/maps/default.asp.

National Park Service

2007 www.nps.gov/ncrc/programs/lwcf/protect.html.

2007 www.nps.gov/lwcf.

Renton, City of

www.ci.renton.wa.us.

2005 Preliminary Draft, Trails Plan.

2005 Cedar River Vicinity Charrette.

2003 Park, Recreation, and Open Space Implementation Plan.

Tukwila, City of

2001 Tukwila Parks, Golf and Open Space Plan.

www.ci.tukwila.wa.us/recreation/recmain.htm.

United States Code

Section 4(f) of the Department of Transportation Act of 1966 (49 USC 303).

U.S. Department of Transportation, Federal Highway Administration.

2005 FHWA Section 4(f) Policy Paper.

Washington State Department of Transportation (WSDOT).

2007 I-405 Tukwila to Renton Project, Air Quality Discipline Report. Prepared by Parsons Brinckerhoff.

2007 I-405 Tukwila to Renton Project, Noise Discipline Report. Prepared by Parsons Brinckerhoff.

2007 I-405 Tukwila to Renton Project, Cultural, Historic, and Archaeological Technical Memorandum. Prepared by Landau Associates, Inc.

2007 I-405 Tukwila to Renton Project, Visual Quality Technical Memorandum. Prepared by David Evans & Associates.

2007 www.wsdot.wa.gov/fasc/EngineeringPublications/Manuals/EPM/455.pdf. 2006.

2006 Interstate 405 Context-Sensitive Solutions Master Plan.

2005 I-405 Renton Nickel Improvement Project, I-5 to SR 169, Noise Discipline Report. Prepared by Parsons Brinckerhoff.

2005 I-405 Renton Nickel Improvement Project, I-5 to SR 169, Cultural Resources Discipline Report. Prepared by Historical Research Associates.

2005 I-405 Renton Nickel Improvement Project, I-5 to SR 169, Section 4(f) Evaluation. Prepared by Osborn Pacific Group Inc.

2002 I-405 Corridor Program NEPA/SEPA Final Environmental Impact Statement.

2002 I-405 Corridor Program Final Preliminary Section 4(f) Evaluation. Prepared by Michael Booth.

Washington Wildlife and Recreation Grant Program.

2007 http://leap.leg.wa.gov/leap/Budget/leapdocs/c0305wwrp_0605.pdf. 2006.

Communications

Austin, Marguerite, Recreation and Conservation Office.
Telephone communication.

Betlach, Leslie, Director, Renton Parks. Telephone and email
communications.

Cole, Adam, Recreation and Conservation Office, Telephone
and email communications.

Fletcher, Bruce, Director, Tukwila Parks. Telephone and email
communications.

Jennings, Darrell, Interagency Committee for Outdoor
Recreation. Telephone and email communications, and
meeting.

Ramsey, Heather, National Park Service. Telephone and email
communications, and meeting.

Still, Rick, Assistant Director, Tukwila Parks. Telephone
communication.

APPENDIX A LETTER OF CONCURRENCE, CITY OF RENTON

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RECEIVED

600 - 108th Avenue NE, Suite 405
Bellevue, WA 98004
Main 425-456-8500
Fax 425-456-8600
MS: NB82-250

AN 2 2 2008

TRANS CORRIDORS OFFICE

January 9, 2008

COPY

Terry Higashiyama, Community Services Administrator
City of Renton
1055 Grady Way
Renton, WA 98055

Re: **I-405, Tukwila to Renton Improvement Project (I-5 to SR 169 - Phase 2)
Liberty Park, Cedar River Park, Cedar River Trail, and the Narco Property**

Dear Ms. Higashiyama:

The City of Renton (the City) and WSDOT began a collaborative process in 2005 with a design charette. This charette was in response to the anticipated effects that may result from the proposed expansion of I-405 through the area of the Tri-Parks. The charette resulted in several design concepts that were refined until both the City and WSDOT agreed on the project footprint. The results are now being carried forward in the Tukwila to Renton Improvement Project's (the Project) Section 4(f) Evaluation.

Section 4(f) of the Department of Transportation Act of 1966 (49 USC 303) prohibits the Federal Highway Administration from approving a transportation project that uses land from a significant park, recreation area, wildlife or waterfowl refuge, or land of a historic site of national, state, or local significance, unless there is no feasible and prudent alternative, and the project includes all possible planning to minimize harm to the property.

This letter summarizes the consultation between Leslie Betlach, Director, Renton Parks, and Linda Osborn, I-405 Project Team on October 25, 2007. The I-405 Project Team completed a Section 4(f) evaluation for each of the resources. We prepared the evaluations based on guidance contained in the FHWA Section 4(f) Policy Paper issued March 1, 2005; Title 2 of the Code of Federal Regulations, Section 771.135 (Section 4(f)); and the WSDOT *Environmental Procedures Manual* published March, 2005.

There will be no land acquired, either permanently or temporarily from Liberty Park, Cedar River Trail, and the Narco property. Permanent acquisition of Section 4(f) protected resources at Cedar River Park includes 35,752 square feet or 0.82 acres to construct the northbound off-ramp from I-405 to SR 169.

Ms. Higashiyama

January 9, 2008

Page 2 of 2

While the direct effects can be measured and expressed in a quantifiable area, both WSDOT and the City of Renton concur that the Tukwila to Renton Project imposes other, even though less quantifiable, effects to the recreation environments at Liberty Park, Cedar River Park, Cedar River Trail, and the Narco property. The design charrette ferreted out these effects. Through this process, WSDOT joined with the City to develop a master plan concept that works in conjunction with the proposed I-405 corridor improvements. WSDOT and the City arrived at a consensus on necessary and desirable park improvements and further concurred on whether each park improvement would be considered mitigation for effects as a result of the I-405 project or would be city-desired recreation improvements. The outcome of this charette was incorporated into the City of Renton Tri-Park Master Plan, which was adopted by the Renton City Council on September 25, 2006.

The purpose of this letter is to document for the purposes of Section 4(f) compliance that the City concurs with the following:

- 1) The City and WSDOT agree on each party's responsibilities for the Tri-Park elements, as documented in the Project's Section 4(f) Evaluation, based on the magnitude of anticipated impacts by the Project.
- 2) WSDOT and the City agree that mitigation for the impacts will be implemented after the Project improvements are funded.
- 3) WSDOT's desire is to implement the Section 4(f) mitigation during construction of the Project. However, if the City's own funding and timeline for implementation makes this not practical, then the City and WSDOT will develop a plan for mitigating the Project impacts for which WSDOT is responsible.

Please confirm the City's concurrence with the three points above by returning a copy of this letter signed by the City's designated representative.

Sincerely,



Stacy Trussler, Deputy Project Director
WSDOT, I-405 Project
425.456.8563
trussler@wsdot.wa.gov

Concurrence by City of Renton:

Name: David Law

Title: Mayor, City of Renton

Date: 1/17/08

cc: Gregg Zimmerman
Leslie Betlach
Ross Fenton
Jason McKinney

APPENDIX B LETTER OF CONCURRENCE, CITY OF TUKWILA

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February 13, 2008

Bruce Fletcher
Parks Director
City of Tukwila
6300 Southcenter Boulevard
Tukwila, WA 98188

Re: Tukwila to Renton Improvement Project Section 4(f) Consultation Summary for Duwamish-Green River Trail/Christensen Greenbelt, Duwamish-Green River Trail Trailhead, and Interurban Trail

Dear Mr. Fletcher:

The I-405, Tukwila to Renton Improvement Project (I-5 to SR 169 - Phase 2) will widen or construct six bridges over the Green River and reconstruct the I-405 / SR 181 interchange in the City of Tukwila (the City). These improvements will have an effect upon three recreational resources owned or maintained by the City.

This letter summarizes the consultation between Rick Still, Deputy Director, Tukwila Parks and Recreation, and Linda Osborn, I-405 Project Team. The I-405 Project Team completed a Section 4(f) evaluation for each of the resources. We prepared the evaluations based on guidance contained in the FHWA Section 4(f) Policy Paper issued March 1, 2005; Title 2 of the Code of Federal Regulations, Section 771.135 (Section 4(f)); and the WSDOT *Environmental Procedures Manual* published March 2005. The consultation concluded the following:

1) Duwamish-Green River Trail/Christensen Greenbelt

This property was purchased using the Land and Water Conservation Fund Act funds, making it both a Section 6(f) and a Section 4(f) resource. While no direct use will result from the Project, a new bridge crossing over the trail will infringe upon approximately 2,000 square feet of air rights. WSDOT will coordinate with the City, the Washington State Recreation and Conservation Office, and the National Park Service to complete the Section 6(f) process once project funding is secured. No Section 4(f) lands will be permanently acquired from this trail. There will be temporary occupancy during construction. The occupancy is temporary because:

- The disruption to the trail will require less time than the construction period for the entire project;

- There will be no change in ownership;
- The nature and the magnitude of the changes to the Section 4(f) resource are minimal;
- There are no anticipated permanent adverse physical impacts and there will be no interference with the activities or purpose of the resource, on either a temporary or permanent basis; and
- The land being used will be restored to a condition which is at least as good as that prior to the project.

WSDOT will also work with the City of Tukwila to determine appropriate detour routes and signage during construction.

2) Duwamish-Green River Trailhead

The construction of Tukwila Parkway over the Green River will result in a direct use of approximately 36,600 square feet of land and displace approximately 13 parking spaces at the trailhead. WSDOT will replace any park land lost with in-kind mitigation at a location to be agreed upon by the City and WSDOT at the time the Project is funded. WSDOT and the City agree to no net loss of parking spaces at the trailhead. WSDOT and the City also agree to relocate an overlook on the Green River if the constructed Project conflicts with the current location of the overlook. WSDOT will replace existing park amenities, including landscaping, upon the conclusion of the Project.

3) Interurban Trail

This trail currently crosses under I-405 along SR 181. WSDOT will relocate the trail to the east from its current location as part of reconstructing the I-405 / SR 181 Interchange. The trail will be routed to cross under I-405 adjacent to the Union Pacific and the Burlington Northern Santa Fe railroad right-of-way. No Section 4(f) lands will be permanently acquired from this trail. There will be temporary occupancy during construction. The occupancy is temporary because:

- The disruption to the trail will require less time than the construction period for the entire project;
- There will be no change in ownership;
- The nature and the magnitude of the changes to the Section 4(f) resource are minimal;
- There are no anticipated permanent adverse physical impacts and there will be no interference with the activities or purpose of the resource, on either a temporary or permanent basis; and

Mr. Bruce Fletcher
Page 3
February 13, 2008

- The land being used will be restored to a condition which is at least as good as that prior to the project.

WSDOT will also work with the City of Tukwila to determine appropriate detour routes and signage during construction.

Please confirm the City's concurrence with the three points above by returning a copy of this letter signed by the City's designated representative.

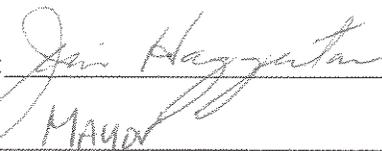
Sincerely,



Stacy Trussler, Deputy Project Director
WSDOT, I-405 Project
425.456.8563
trussler@wsdot.wa.gov

Concurrence by City of Tukwila:

Name:



Title:

MAYOR

Date:

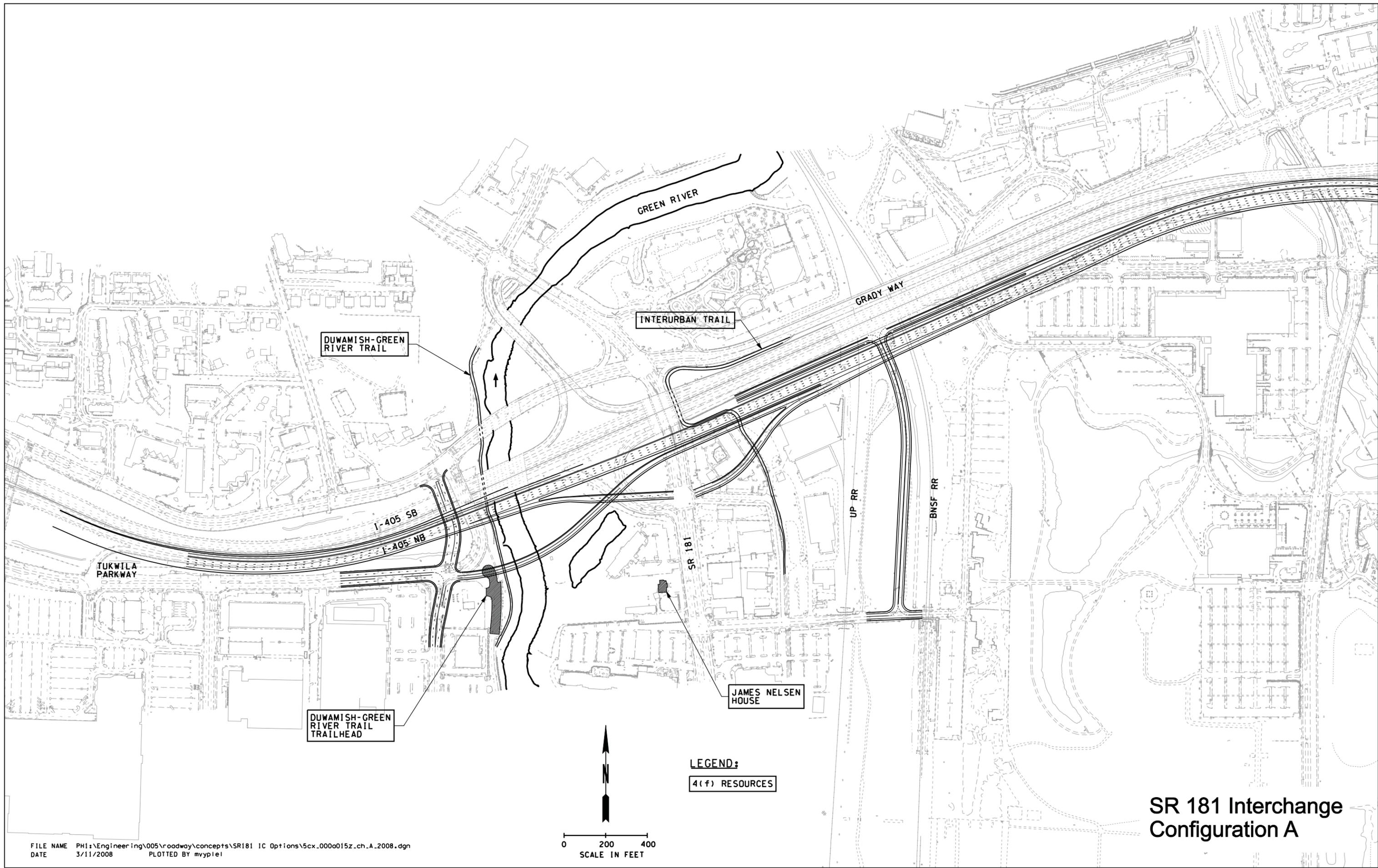
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APPENDIX C ALTERNATIVES EVALUATED

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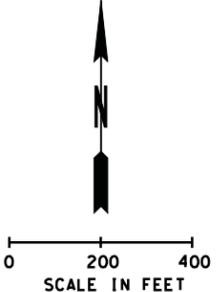
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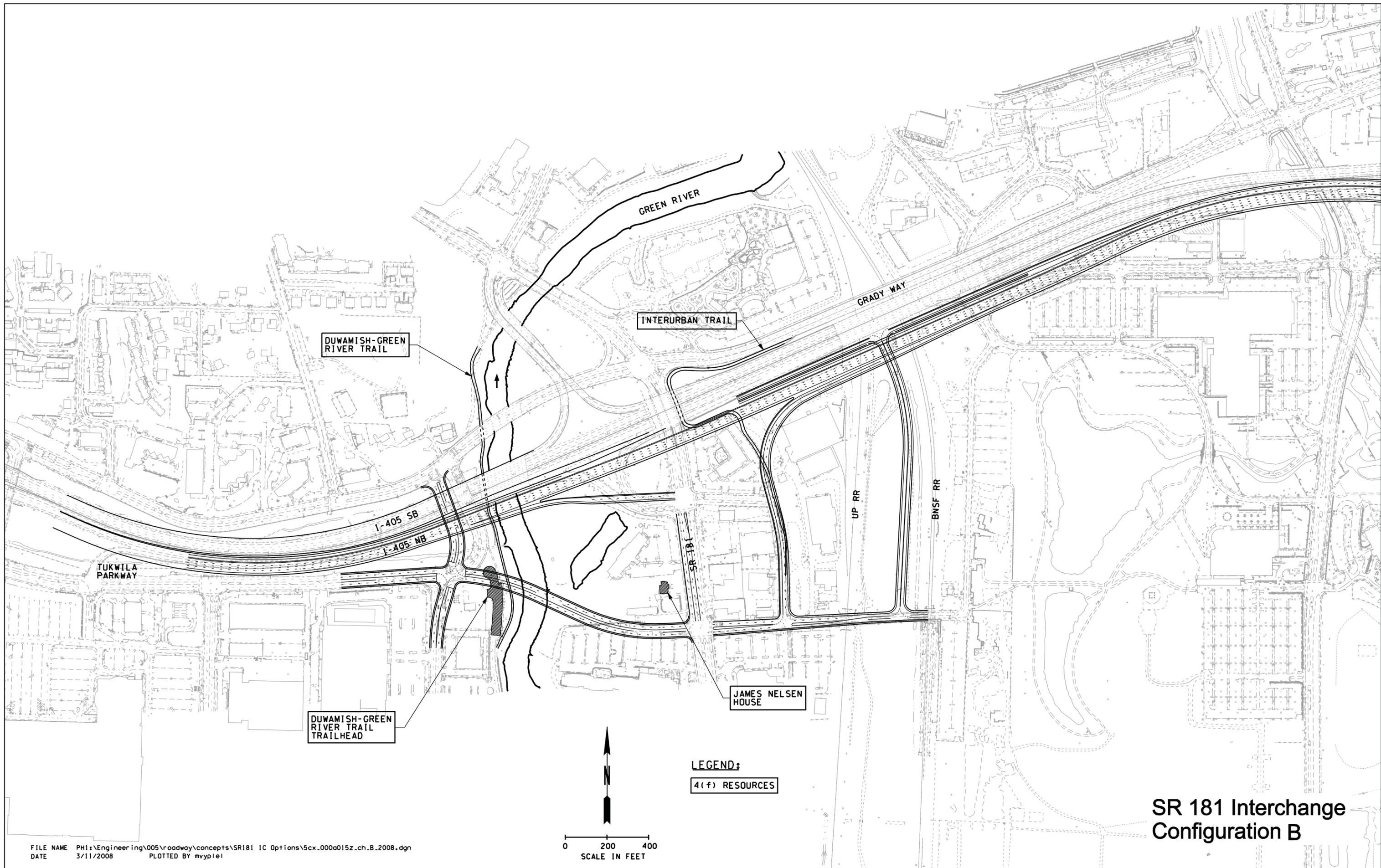
DUWAMISH-GREEN RIVER TRAIL HEAD

JAMES NELSEN HOUSE

LEGEND:
4(f) RESOURCES

SR 181 Interchange Configuration A





DUWAMISH-GREEN RIVER TRAIL

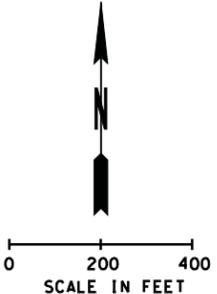
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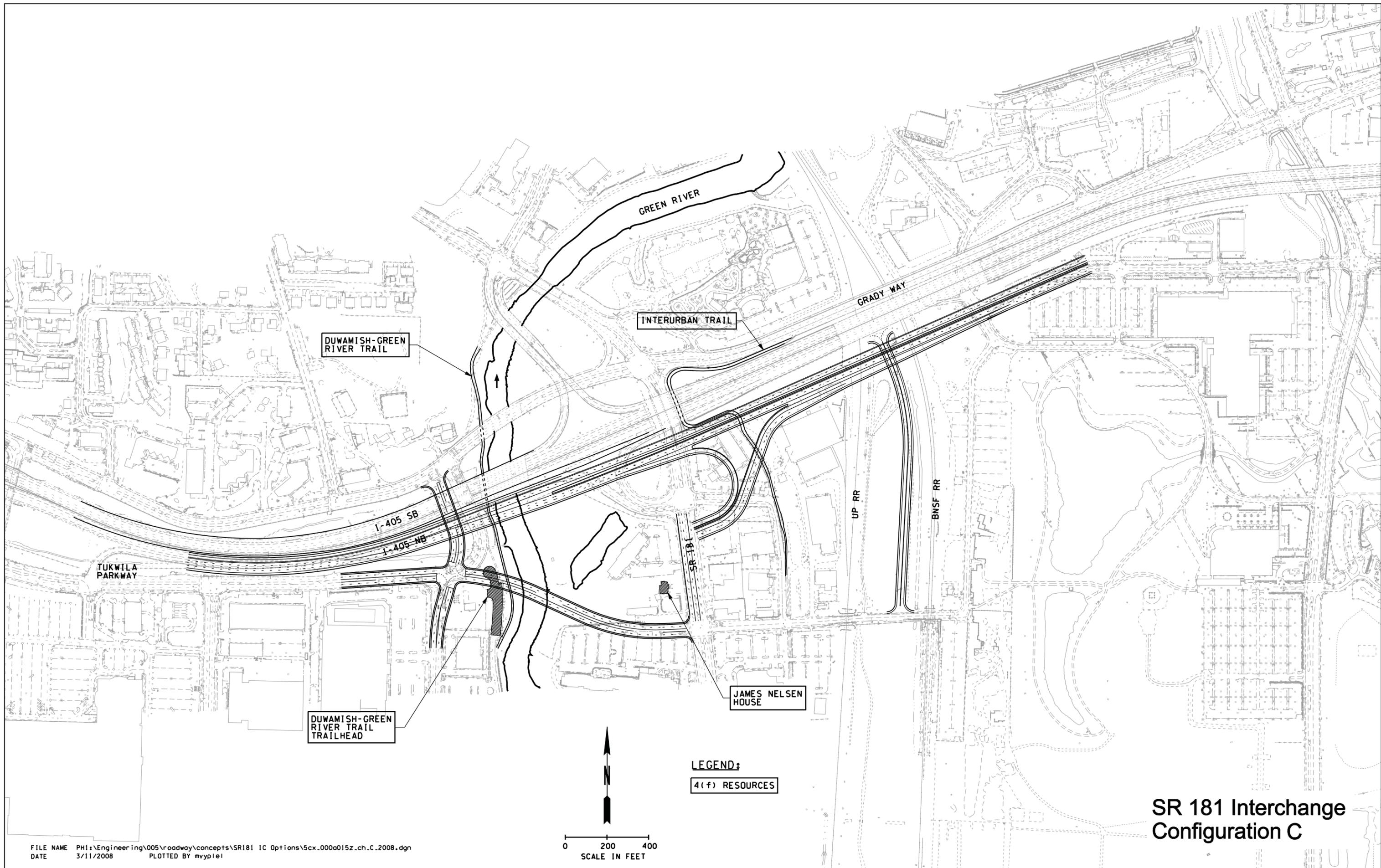
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JAMES NELSEN HOUSE

LEGEND:
4(f) RESOURCES

SR 181 Interchange Configuration B





DUWAMISH-GREEN RIVER TRAIL

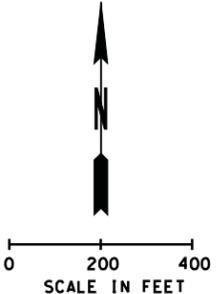
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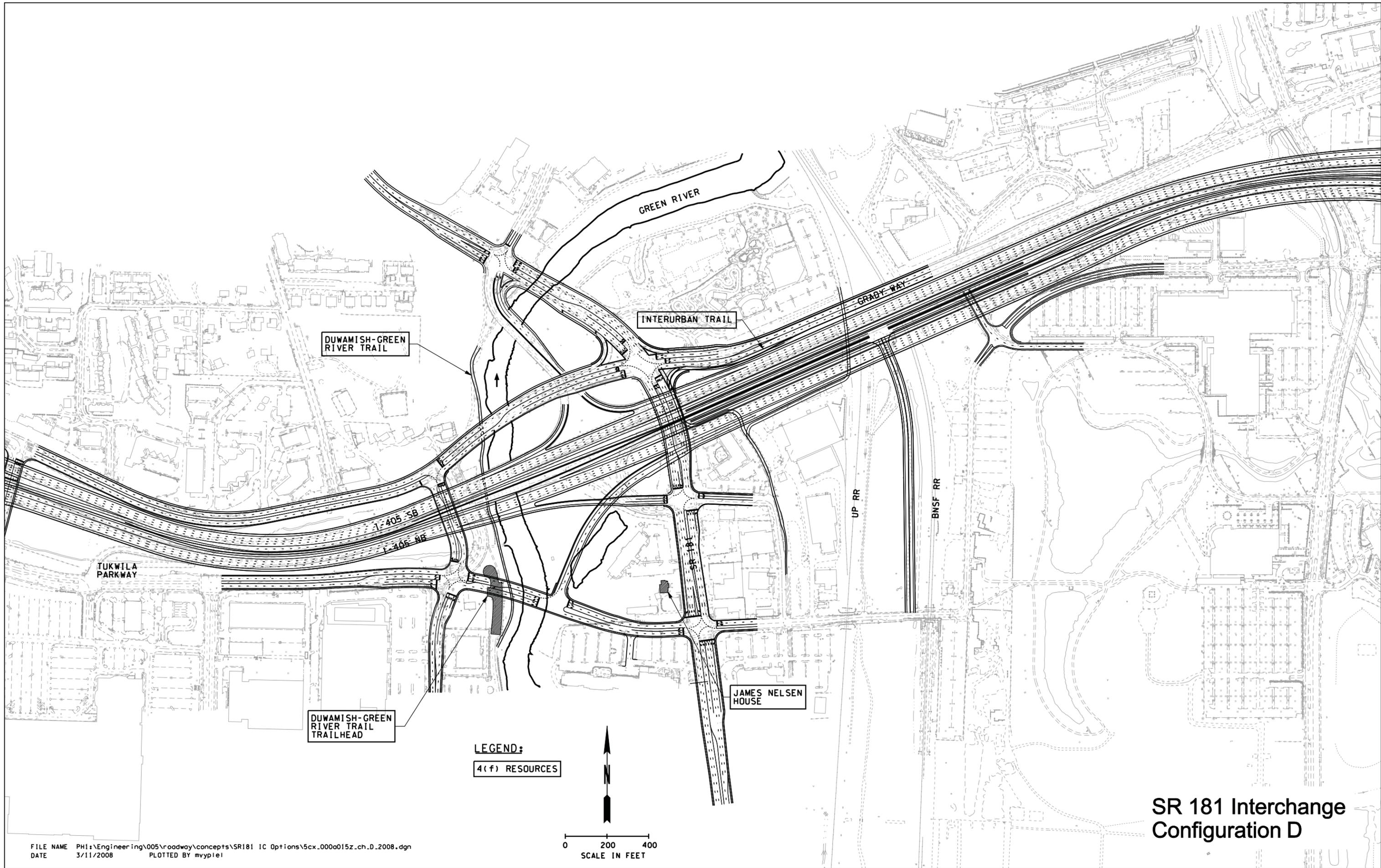
DUWAMISH-GREEN RIVER TRAIL HEAD

JAMES NELSEN HOUSE

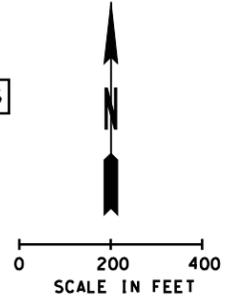
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4(f) RESOURCES

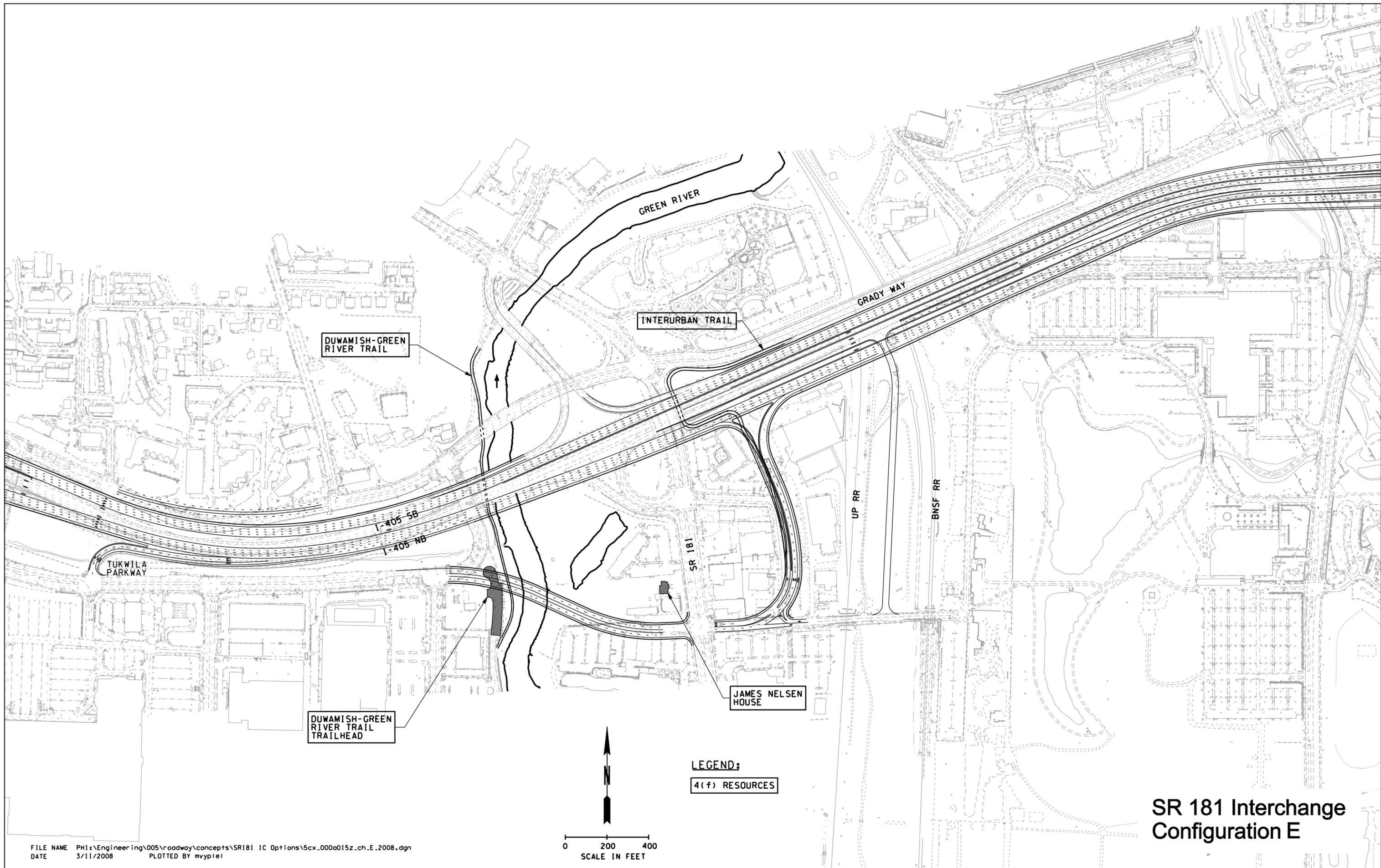
SR 181 Interchange Configuration C





**SR 181 Interchange
Configuration D**





DUWAMISH-GREEN RIVER TRAIL

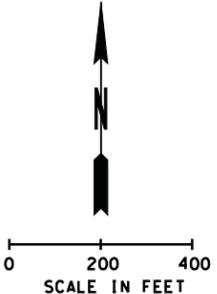
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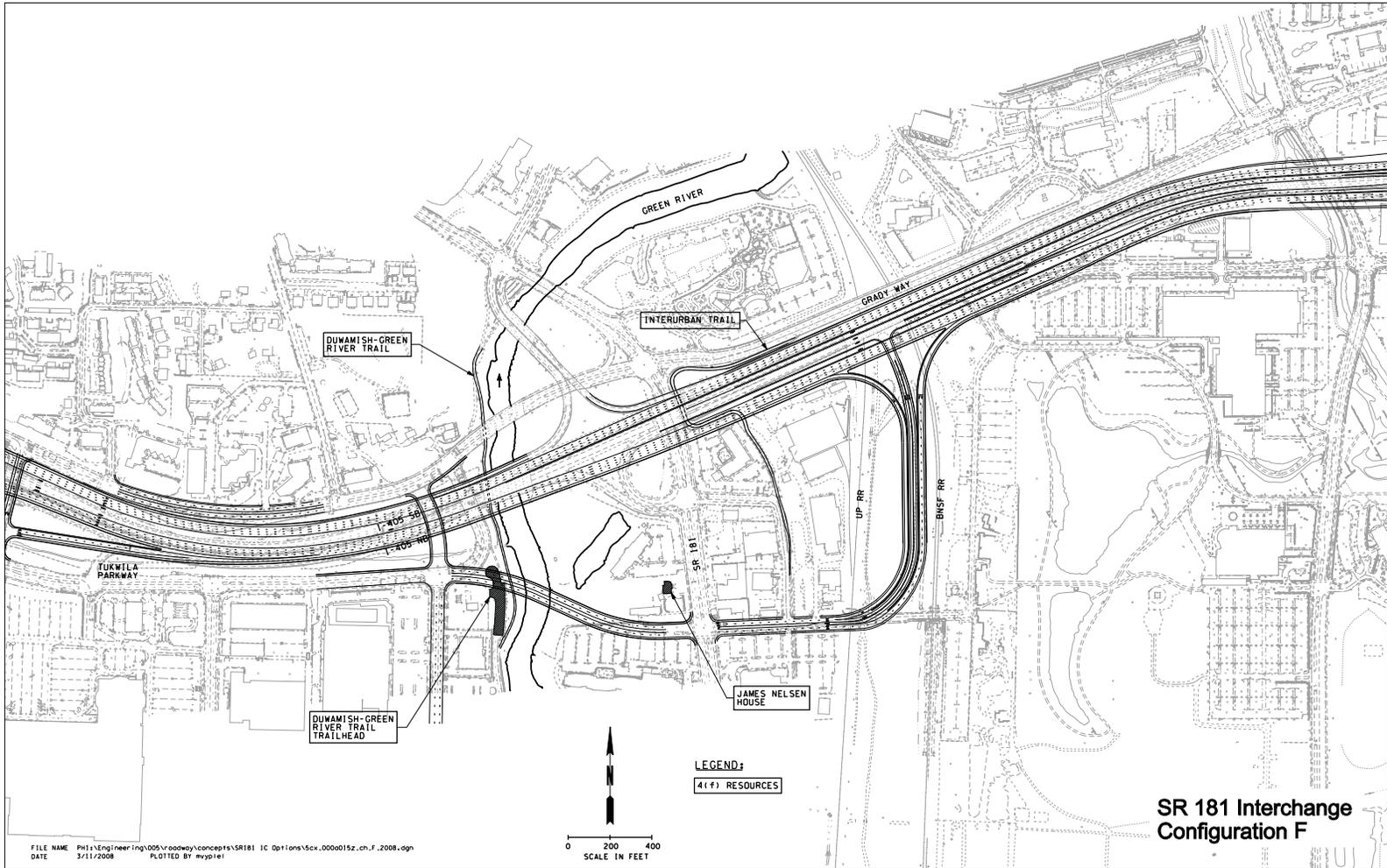
DUWAMISH-GREEN RIVER TRAIL HEAD

JAMES NELSEN HOUSE

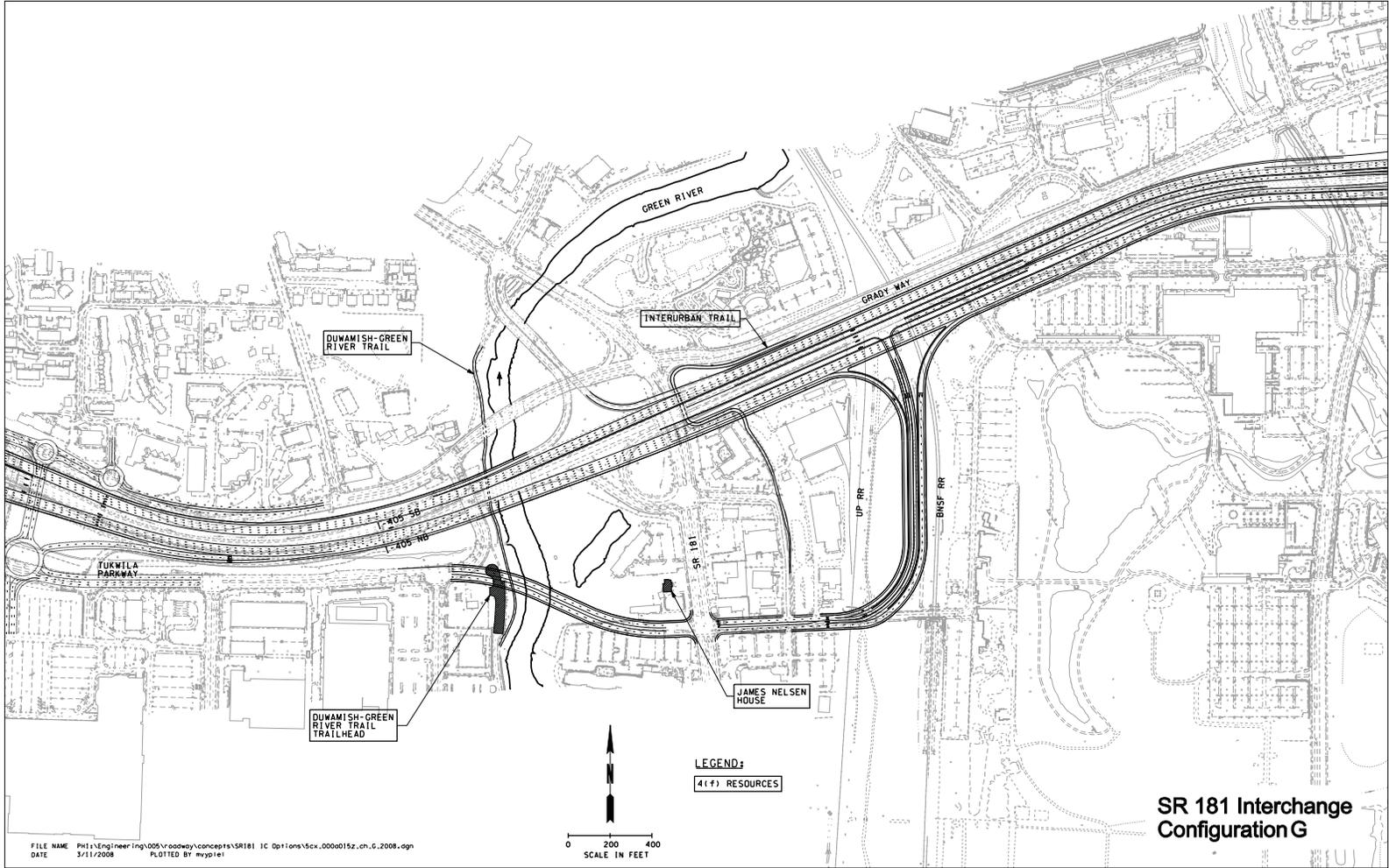
LEGEND:
4(f) RESOURCES

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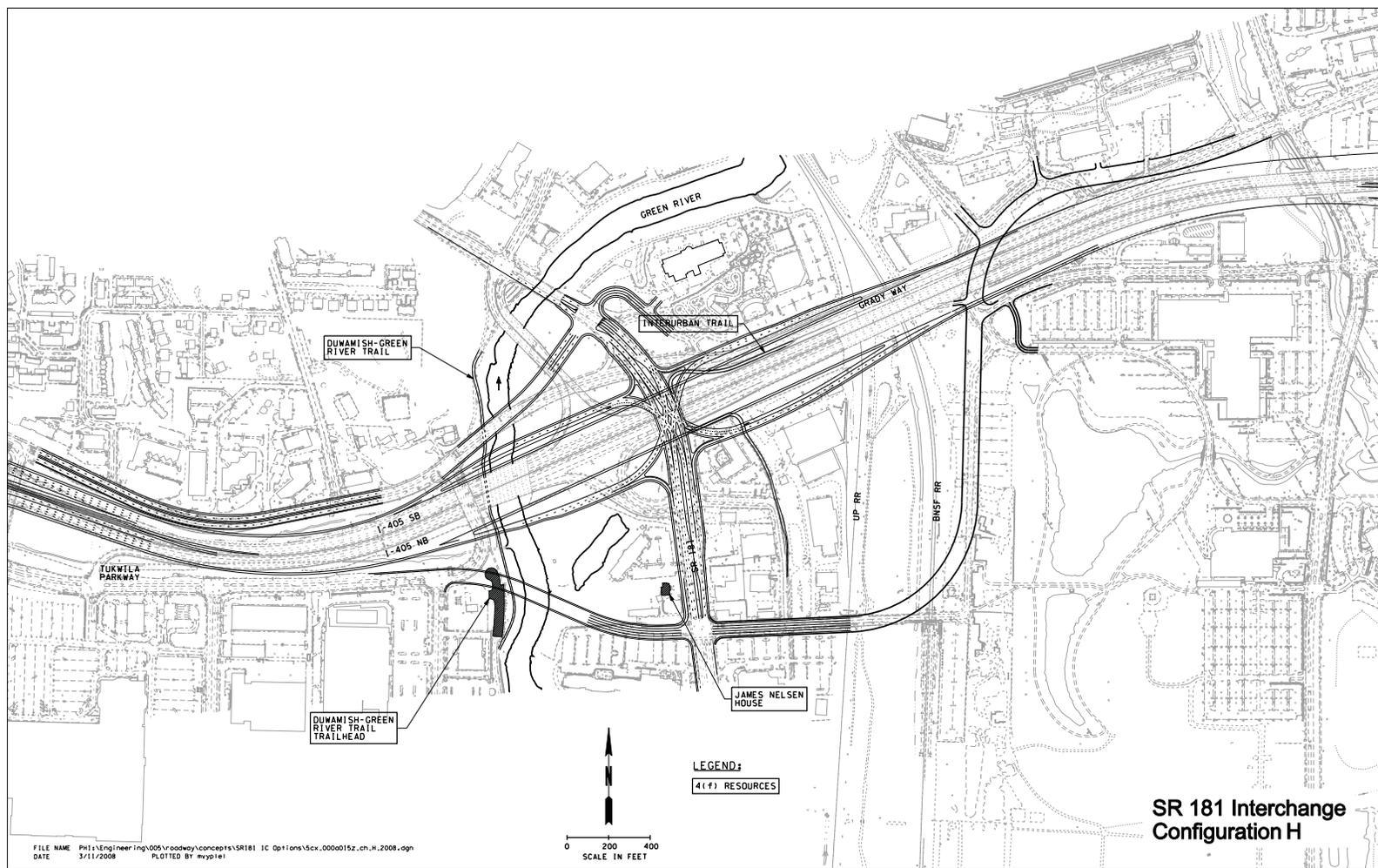




**SR 181 Interchange
Configuration F**

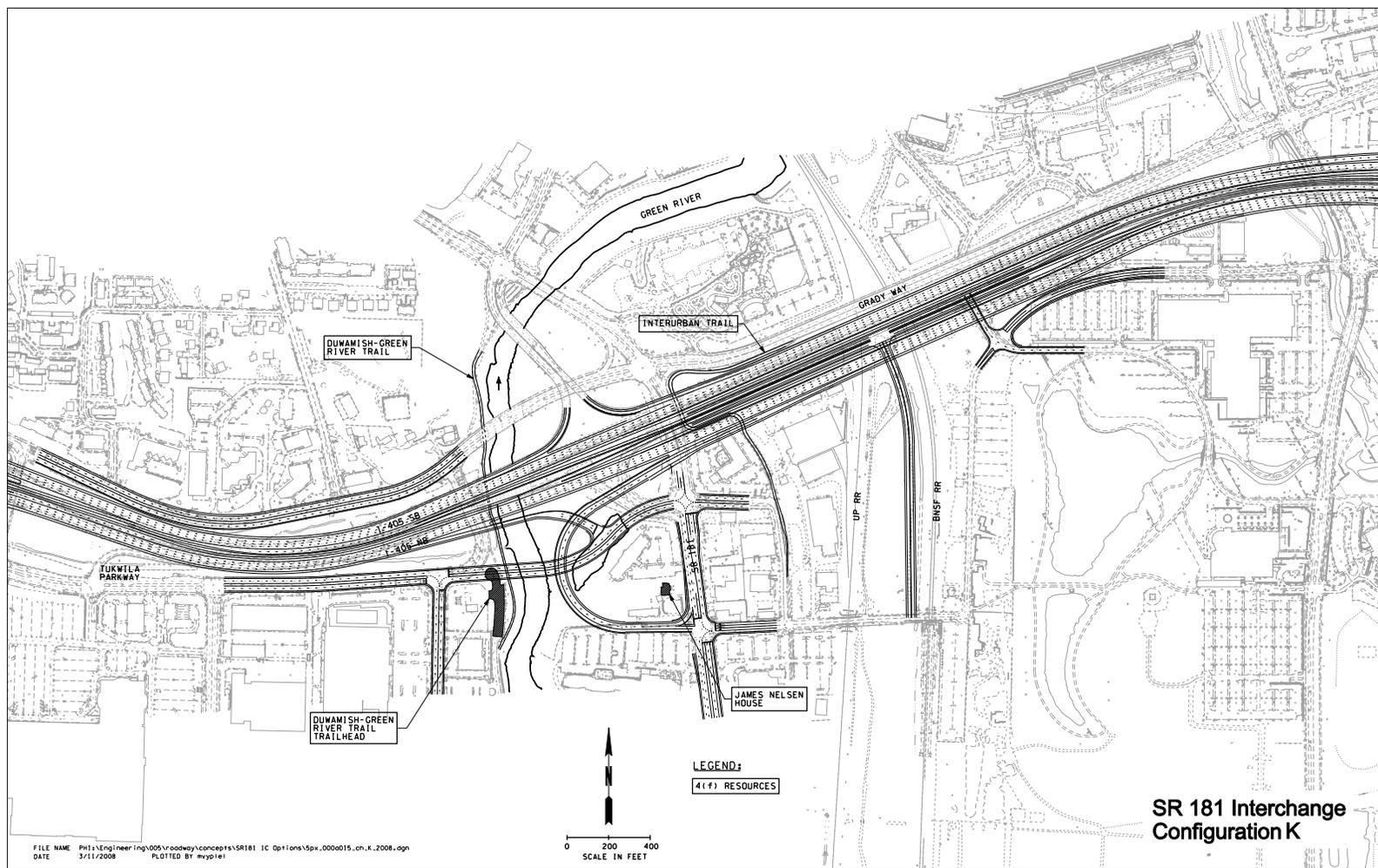


SR 181 Interchange Configuration G



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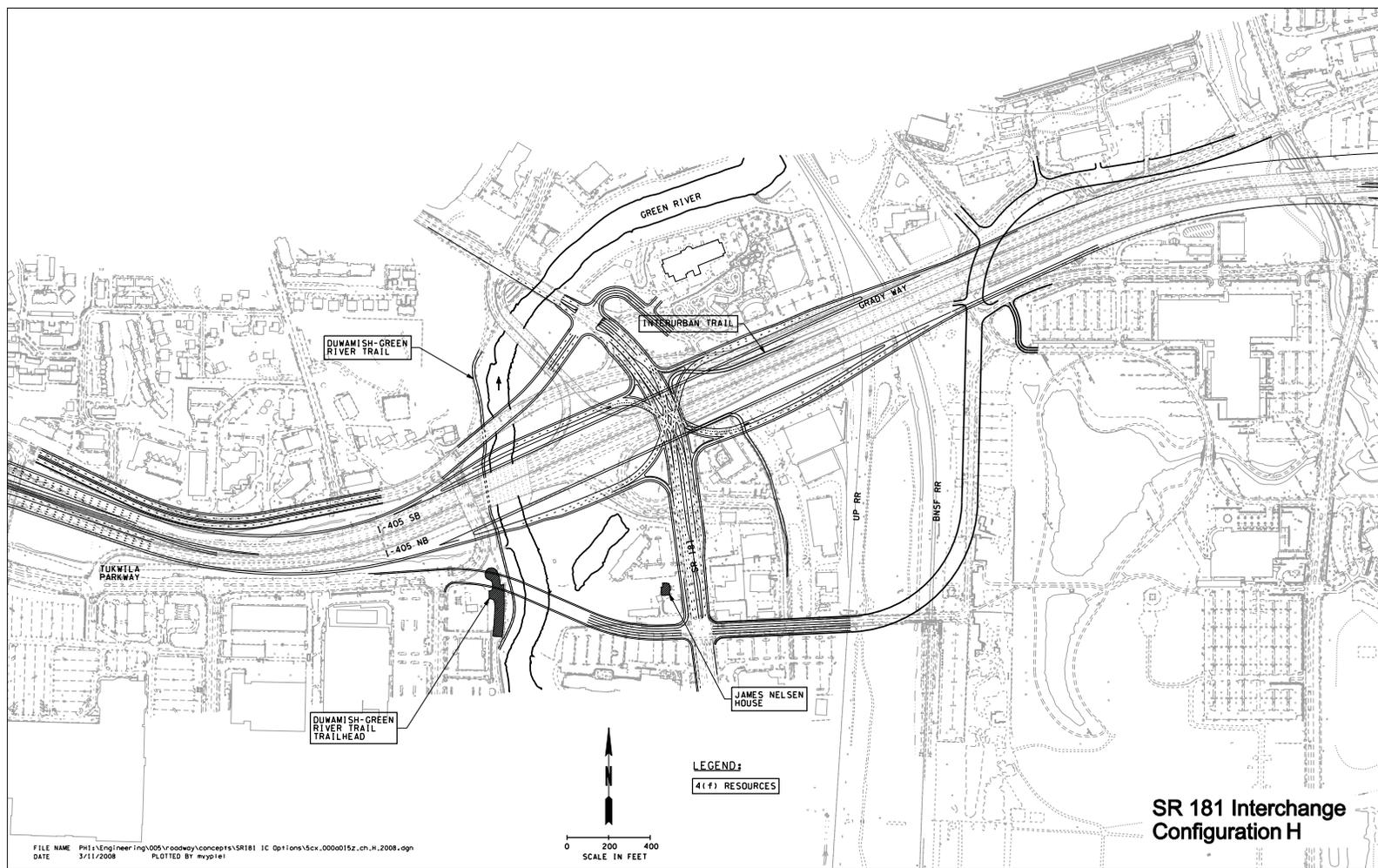
**SR 181 Interchange
 Configuration H**



**SR 181 Interchange
Configuration K**

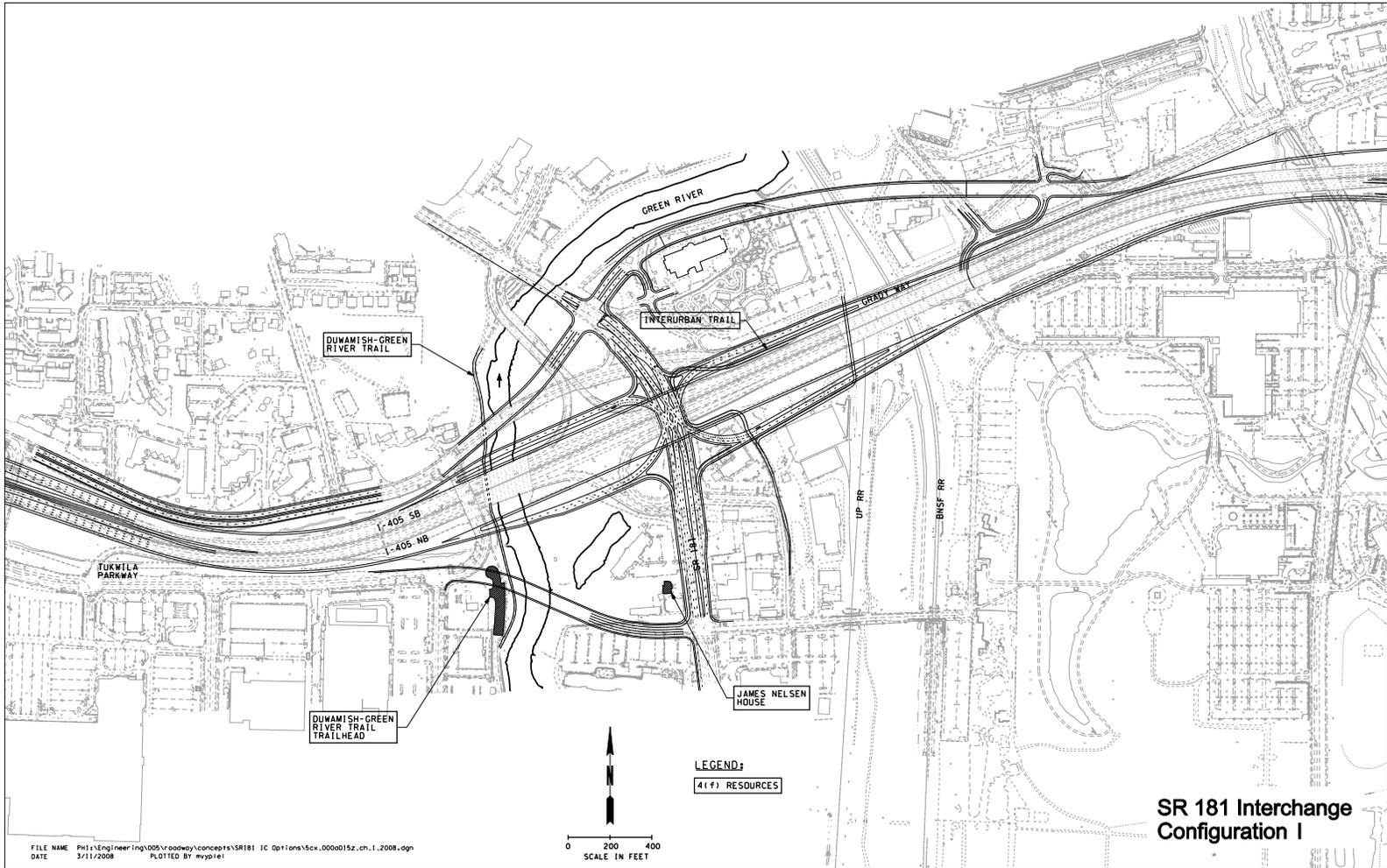
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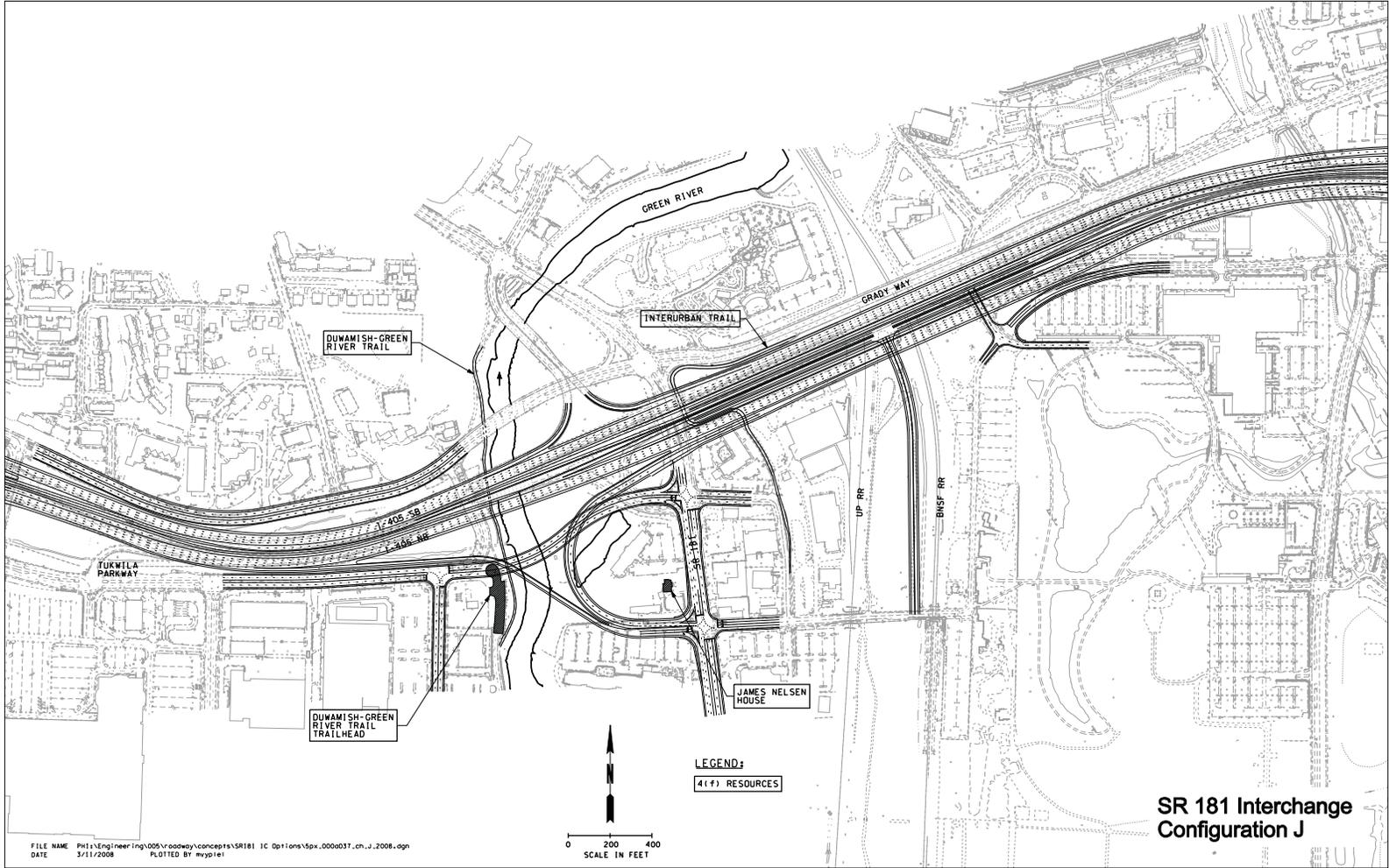
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**SR 181 Interchange
 Configuration H**





**SR 181 Interchange
Configuration J**

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